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School administrators' perceptions and practices associated with the utilization of eWalk during classroom walk-throughs

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by

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ABSTRACT

In the era of accountability, school administrators must not only meet the demands of merely managing a building but must also serve as the instructional leader and lead learner working to improve both the teaching and learning of the institution. Increasingly, administrators are using the supervisory practice of classroom walk-throughs as a means of formative evaluation to purposefully monitor and evaluate the intended curriculum as well as lead the learning within professional learning communities in order to assess the enacted curriculum as a means to improve student academic achievement. The classroom walk-through process can assist administrators in creating a systemic process to monitor implementation of instructional practices, professional development initiatives, and student learning experiences. Recently, electronic evaluation technologies and tools (EETT) such as eWalk are being utilized in conjunction with walk-throughs as a method for collecting, aggregating, and disaggregating data as well as the catalyst to improve the teaching-learning process. The aggregate data gathered through the use of eWalk allows for the administrators to engage the faculty in meaningful and reflective discussions regarding the schools instructional practices.

This study examined how the level of eWalk use, as determined by frequency and years of experience, impacted building-level school administrators' practices and behaviors regarding the intent of conducting classroom walk-throughs. The purpose of this study was to: (a) gather general demographic information; (b) answer general questions regarding information on demographics and frequency of classroom walk-through behavior; (c) descriptive research regarding the perception of the purpose of the function and intent of the administrator as he/she conducts classroom walk-throughs; (d) reveal perceptions of their

behavior to function as the lead learner, conducting joint classroom walk-throughs, sharing of the walk-through data results; and (e) explore the associated practices tied to the framework of Balanced Leadership and those behaviors linked to conducting walk-throughs.

This study used quantitative research methods to analyze the descriptive and inferential statistics (ANOVA) of administrative practices and their perceptions through a self-reported questionnaire to determine the impact of using eWalk during the classroom walk-through process. The Qualtrics software was the web-based survey tool used to design, administer, and collect respondents' data that was downloaded into Microsoft Excel 2007 and the Statistic Package of Social Sciences (SPSS) version 17.0 for analysis. The survey was sent to an adjusted sample size of 6,325 eWalk users currently serving as administrators in the three states of Georgia, Iowa, and Kentucky with 649 started surveys resulting in an overall response rate of 10.26%. The final data analysis utilized the 411 finished surveys completed by building-level school administrators.

The analysis of the results demonstrated that there were no overall statistically significant results between the level of eWalk use in relationship to the impact upon a) the perception and behavior regarding classroom walk-throughs for formative evaluation, b) the perception of themselves as the lead learner, or c) the change in associated practices linked to the Balanced Leadership framework. However, the practice of sharing aggregate classroom walk-through data with the faculty was linked with statistical significance to an increase in practices associated with conducing classroom walk-throughs with the use of eWalk for a) the purpose of formative evaluation, b) functioning as the lead learner of the faculty, and c) the associated practices of MCREL's Balanced Leadership responsibilities.

The findings of this study illustrate that the practice of sharing the aggregate data gathered during classroom walk-throughs is a cornerstone to the impact of using eWalk as a means to influence a school leader's behavior and practices aimed at improving teaching and learning in the school. The incorporation of eWalk can be the systemic guiding force that a) solidifies the process for collecting data from walk-throughs, b) provides easy to use reports to aid in analysis, c) allows for the administrator to review data trends prior to prompting feedback to spur reflective dialogue, d) assist in creating a professional learning community revolving around discussion of teaching and learning, and e) the data gathered can be incorporated into continuous improvement plans for both the school and district.

CHAPTER 1. INTRODUCTION

As the high school principal enters Ms. Thompson's Government classroom, a few students exchange glances. Why else would the principal be visiting the room if not to pull a student out and reprimand him or her for an infraction of school policy? The principal stands in the doorway and seems to be sending a text message on his phone as he periodically scans the classroom and listens to the group discussion. The teacher continues to assist a group in the far corner and glances toward the principal, who has now entered the room. Curiously, the principal walks around the classroom peering over the shoulders of a few students; he occasionally probes students about the lesson while the teacher continues with class discussion. The principal touches his iPhone periodically. To the students, it appears that he is text messaging. Billy nudges Joe, who turns to the principal and says with a smile, "Hey, no cell phones in school!" The principal smiles back and continues walking around watching the students and the teacher interact. After a few minutes the principal exits the room and a student exclaims from the back of the room, "Man, I thought I was done for and I didn't even know what I had done!" The teacher smiles and responds, "The principal was here simply to observe the day's lesson, your learning, and my instruction. Maybe next time he's back you can have him join in your group's discussion." The principal walks down the hallway, enters his final comments regarding his observation, and hits "save" as he approaches the next classroom door.

This scenario is becoming more common across the country as school principals increase the frequency of classroom walk-throughs using electronic evaluation technology and tools (EETT) to assist in the data-gathering process. What the students in the classroom

did not know is that the principal was using new technology downloaded onto his phone to gather data for future conversation with Ms. Thompson and the rest of the faculty. This form of observation is a departure from traditional supervisory practices in which the principal would only enter the classroom for disciplinary reasons or for the tri-annual formal teacher evaluation. Previously, when classroom walk-throughs were conducted sporadically, these visits were isolated and, except for the rare occurrence of an ambitious administrator putting forth a laborious effort to compile the data and conduct analyses, little was gained from the process (Granada & Vriesenga, 2008; Larson, 2007). Principals are increasingly using the walk-through process to gather data to assess the teaching and learning practices within classrooms (Cervone & Martinez-Miller, 2007; David, 2007; Granada & Vriesenga, 2008; Larson, 2007; Skretta, 2007). Currently, with the use of EETT, the data now can be quickly aggregated to help inform meaningful feedback, dialogue, and influence future professional development (Granada & Vriesenga, 2008; Kachur, Stout, & Edwards, 2009).

School Leadership

The origin of the term "principal" stems from the notion that the most veteran and/or accomplished teacher would assume the part-time role as "principal-teacher" and serve as an example and assist others in implementing appropriate instructional strategies (Sergiovanni, 2006; Tyack & Hansot, 1982). During the mid 19th century, there was a move to create "principal teachers," or lead teachers who took on some of the supervisory/managerial responsibilities (Spring, 1997). During the industrial revolution and through the early 20th century, the emphasis of the principal's role resembled that of a factory foreman concerned about efficiency and the creation of a standardized product. Later behaviorist research

emphasized that there were standardized teacher behaviors that could be linked to student learning (Ellett & Teddlie, 2003).

The 21st century economic, political, and social demands that impact the K-12 education system necessitate that an administrator no longer merely manage a building but also lead the learning of the institution. Therefore, an administrator must once again become the "principal" instructional leader for all of the faculty to ensure gains in student achievement (Blase & Blase, 2000; DuFour, 2002; Leithwood & Riehl, 2003). DuFour and Marzano (2009) contended that, "If the fundamental purpose of schools is to ensure that all students learn at high levels, then schools do not need instructional leaders - they need leading learners who focus on evidence of learning" (p. 63). As an administrator functions as the "lead learner," he must model an appropriate desire for learning alongside the group. Instructional leadership must go beyond the paradigm that the principal has all of the answers (e.g., under the instructional leader paradigm); instead, one must create the circumstances to facilitate the learning of the teachers through collaboration and distributed leadership (Blase & Blase, 2000; DuFour & Marzano, 2009; Fullan, 2002; Leithwood & Riehl, 2003; Marzano, Waters, & McNulty, 2005).

Supervision

Teacher supervision typically has been seen as a managerial duty of mere compliance for personnel records to determine whether or not teachers are meeting state and district standards and criteria, as well as impacting decisions regarding retention (summative evaluation) (C. Danielson & McGreal, 2000). As part of supervision, principals conduct formal scheduled evaluations that typically last for a large portion of a lesson (e.g., 30

minutes or more). As part of this observation process, the teacher meets with an evaluator for a pre- and post-conference. Again, it should be stressed that this typically is seen by teachers and administrators as an event that may happen once every two or three years. Increasingly, the importance of improving current teaching practices has opened the doors for administrators to enter classrooms with the goal of fostering methodological growth and, when necessary, to remediate instructional practices through formative evaluation.

Walk-throughs

The supervisory practice of conducting walk-throughs as a means for formative evaluation in order to enhance teacher development enables administrators to visit classrooms for short periods of time to observe instruction and learning as well as to gather data regarding these practices (Cervone & Martinez-Miller, 2007; David, 2007; Ginsberg & Murphy, 2002; Granada & Vriesenga, 2008; Kachur, et al., 2009; Larson, 2007; Pitler & Goodwin, 2008; Richardson, 2006). Walk-throughs are conducted by administrators as part of a typical supervisory role in an attempt to impact instructional practices. Many different forms of walk-throughs exist; they vary in length, format, and intended purpose. Yet commonality around the practice of walk-throughs also exist in that an evaluator visits classrooms for a brief time period to assess instructional practices, student engagement, and evidence of student learning (Downey, Steffy, English, Frase, & Poston, 2004; Larson, 2007; Skretta, 2008; Zepeda, 2008).

The intent of the walk-throughs conducted by managers and instructional leaders drastically differ. Historically, many administrators visited classrooms because this was an integral part of their managerial job description. Yet the purpose of these observations was

often unclear; many administrators were simply intentionally or unintentionally transmitting the "police factor" through "School Management by Wandering Around" (SMWA) (Frase & Hetzel, 2002). In the case of SMWA, walk-throughs functioned solely as part of summative evaluations where principals wander in and out of classrooms noting the "look-fors." Increasingly, principals are becoming purposeful in their intent to conduct walk-throughs in order to gain an understanding of the enacted curriculum. Furthermore, administrators are conducting walk-throughs intended for formative evaluation to provide on-going feedback. Specifically, feedback is related to the areas that individual teachers and the collective faculty need to target in order to improve and/or to ensure proper implementation of recent professional development (Downey, et al., 2004; DuFour & Marzano, 2009).

Under the managerial paradigm of School Management by Wandering Around (SMWA), a principal conducting walk-throughs acts as the referee who is watching to ensure that no one steps out of line in a game of "gotcha" (David, 2007; Frase & Hetzel, 2002). With a renewed belief and desire to ensure a guaranteed and viable curriculum, the principal must serve as the coach of individual teachers and also facilitate the larger faculty to come together to work with one another to achieve the ultimate goal of ensuring that all students will learn and be successful (DuFour & Marzano, 2009). A guaranteed curriculum refers to the "opportunity to learn" the curriculum in light of the intended, implemented, and attained curriculum (Marzano, 2003). The intended curriculum refers to the course content mandated by the district or state and documented by a curriculum map. The implemented curriculum is what is actually taught by the instructor in a particular course; this may or may not include additions and subtractions from the intended curriculum. The attained curriculum refers to the

content and skill-set to be achieved as a result of the implemented curriculum. The issue of a curriculum being viable refers to the issue of providing an appropriate amount of "time" to teach the intended and implemented curriculum. Marzano (2001, 2003) has lead research that has synthesized and compiled other research studies in various meta-analyses to illustrate that having a guaranteed and viable curriculum has a strong correlation to higher student academic achievement. In turn, it is the ultimate responsibility of the school principal as the instructional leader to lead the monitoring and evaluation to ensure that the intended curriculum is being implemented and that the circumstances are present for all students to attain proficiency.

Electronic Evaluation Technologies and Tools (EETT)

Recently, there has been an increased use of Personal Digital Assistants (PDAs) and web sites to collect data during walk-throughs (Granada & Vriesenga, 2008; Kachur, et al., 2009). There is no consistent terminology, however, regarding the use of these devices in conducting walk-throughs (David, 2007). In this study, these electronic data-collection devices used are referred to as *electronic evaluation technologies and tools* (EETT). Marzano (2003) revealed in his meta-analysis that the 20% variance on student achievement could be further broken into the impact of the individual teacher (67%). Therefore, the overall impact of the individual teacher on student achievement is 13% and the school organization has the remaining 7%. Thus, in an era of heightened school accountability, administrators must be vigilant to ensure that they prioritize the efforts to lead the learning of the organization and impact the development of the individual teacher (Marzano, 2003).

Electronic evaluation technologies and tools can assist an evaluator in collecting and disaggregating a large amount of targeted data efficiently, enabling the administrator to make

data-driven decisions. Data-driven decision-making occurs when the collected data serve as the basis to set priorities, monitor progress of those initiatives, and maintain continuous improvement (Park & Datnow, 2009). In an ideal school system, all are learners. The administrator must truly become the principal learner who facilitates and demonstrates the merger of the science of best practices in education with the art of the delivery in the individual circumstances of the classroom. Without EETT to assist, the process of formative evaluation may be limited to isolated drive-by snapshots of moments in time, lacking perspective of the greater picture and missing the crucial trends that are embedded within the aggregated data (Granada & Vriesenga, 2008; Kachur, et al., 2009).

Statement of the Problem

A systematic method for supervision and evaluation is necessary to ensure that our teachers are effectively reaching all students in the classroom, and that they are implementing innovative initiatives that will prepare students for future jobs. In an era of increased school accountability, the role of the school administrator has received increased professionalization from a mere manager to that of an instructional leader. Yet, it is necessary in the daily operation of a school for administrators to balance the wearing of three hats: the manager, the instructional leader, and the lead learner. School administrators must understand that management and leadership are intertwined and cannot be separated (Witziers, Bosker, & Kruger, 2003). Therefore, the practice of supervision and evaluation has taken on related responsibilities and aspects of managerial leadership, instructional leadership, and the functioning of a lead learner (see Figure 1). The point of merging managerial roles with instructional leadership responsibilities ensures that as a manager the principal can institute

initiatives; he will also become a lead learner to ensure proper implementation that becomes embedded into the practices of the school culture. These three leadership roles naturally flow into the necessary associated administrator functions of monitoring and evaluation; knowledge and involvement in curriculum, instruction, and assessment; and professional development.

Effective instructional leadership that ensures academic achievement for all students entails that expectations be clear, instruction be monitored using walk-through observations, and professional development opportunities be tailored to meet each teacher's individual needs (Ovando & Ramirez, 2007). Classroom walk-throughs provide the opportunity to merge these responsibilities with high visibility and opportunities to foster relationships with staff and students in a purposeful manner aimed at improving teaching and learning. Active involvement in conducting walk-throughs ensures visibility and the ability to maintain order while allowing the opportunity for instructional leadership to be manifested in daily interactions.

There has been little formal research conducted regarding classroom walk-throughs and the role that electronic evaluation technologies and tools have on an administrator's perception of an individual teacher's behavior. The skills required for school leaders to work on effective professional development necessitate the demand for school administrators to become lead learners who will aid collaborative efforts in the process of teacher professionalization (Cervone & Martinez-Miller, 2007; DuFour & Marzano, 2009). This demands on-going evaluations to ensure those practices are occurring in the classrooms and teachers possess the skills necessary to implement the initiatives necessary for improving

student academic achievement. As districts have leaders focusing attention to monitor and collect the walk-through data, it will be necessary to train the individuals and provide a mechanism to those observers in order to systematically gather and analyze the data for continuous improvement (Bernhardt, 1998; Lezotte & McKee, 2002). One way to achieve an effective ongoing evaluation is to use technology to pinpoint areas of concern that need to be addressed early on and, subsequently, to engage in formative evaluation related to the observation data (Granada & Vriesenga, 2008). Armed with data, the administrator and teacher(s) may collaborate to indicate the areas of need in order to grow and continue to advance student academic achievement (Cervone & Martinez-Miller, 2007; Kachur, et al., 2009).

Lead learners must engage the faculty in professional development that is intentional, ongoing, and systematic; these principles are best manifested in effective professional learning communities (PLC) (DuFour & Eaker, 1998; Guskey, 2000). Marzano (2003) revealed that at the cornerstone of school reform is the leadership that ensures sustaining a school improvement initiative by embedding the work into the organizational structure. Change leadership targeted at improving student academic achievement involves school administrators creating a system for continuous improvement of instruction and supervision aimed to improve both teaching and learning that is rigorous, relevant, and based upon respectful and trusting relationships (Wagner, et al., 2006). The effective administrator will be one who can engage as an evaluator and as a coach and lead learner equipped with the knowledge and skill sets to transition student learning into the 21st Century.

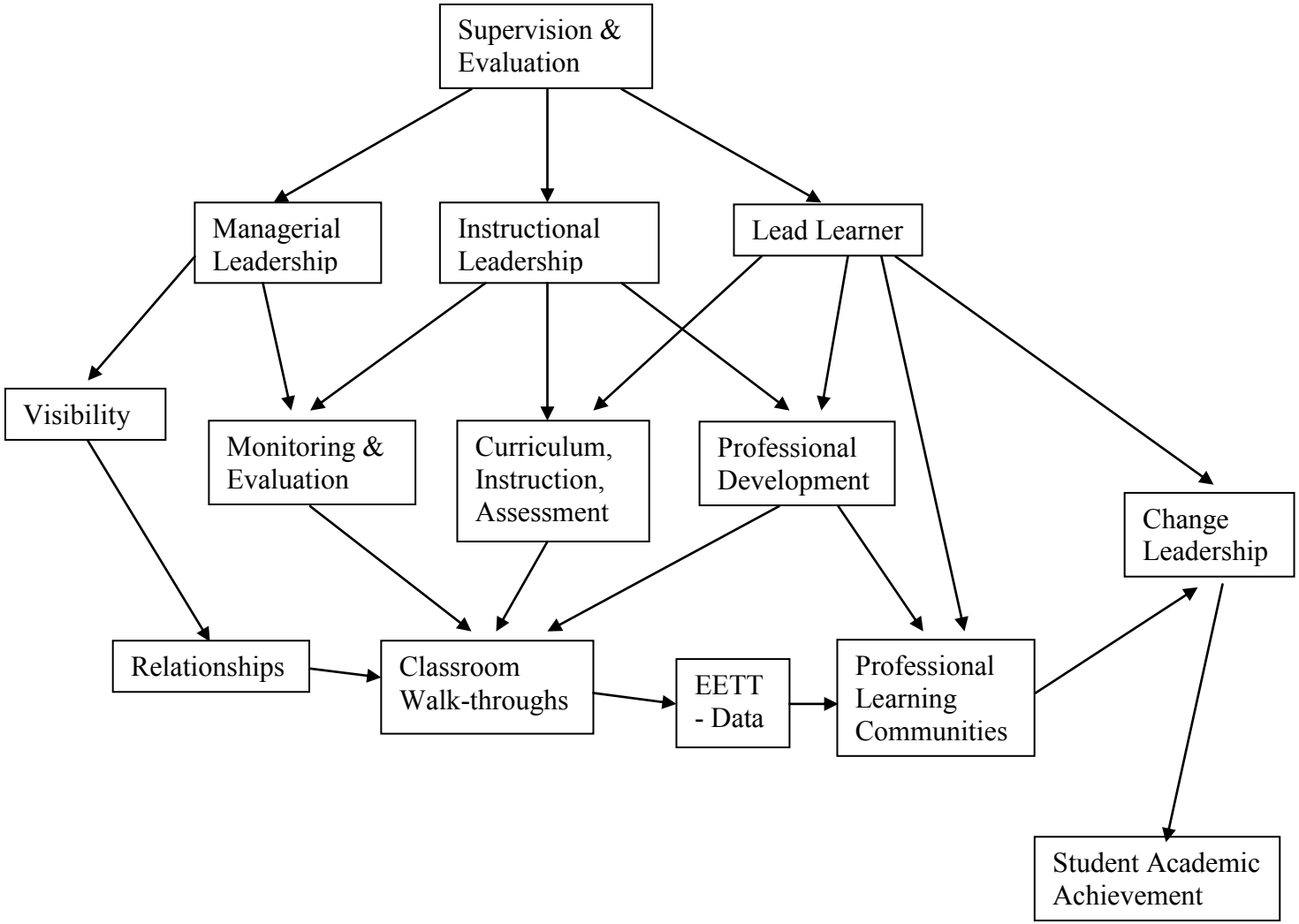

Figure 1. Creating a systematic approach to change leadership by using classroom walk-throughs and EETT

Purpose of the Study

In the current climate of accountability within PK-12 education, a systematic method is necessary to collect and analyze the data gathered from instructional observations. The purpose of this study is to examine building level principals' practices and the relationships of their use of eWalk while conducting classroom walk-throughs. Specifically, the intent of the study was to: (a) gather general demographic information; (b) answer general questions regarding information on demographics and frequency of classroom walk-through behavior; (c) descriptive research regarding the perception of the purpose of the function and intent of the administrator as he/she conducts classroom walk-throughs; (d) reveal perceptions of their behavior to function as the lead learner, conducting joint classroom walk-throughs, sharing of the walk-through data results; and (e) explore the associated practices tied to the framework of Balanced Leadership and those behaviors linked to conducting walk-throughs. Examining how administrators use eWalk during their walk-throughs will shed light on how this practice fits into transforming the supervisory practices and impacting leadership responsibilities.

Research Questions

The following research question was used to guide the study: How does the use of eWalk impact evaluators' perceptions and behaviors regarding the purpose and intent of the classroom walk-through process? More specifically:

1. Who are the administrators currently using eWalk and what are their general demographic characteristics and training experiences associated with classroom walk-throughs?

2. What administrative practices and behaviors are associated with the use of eWalk and how do they impact the processes surrounding classroom walk-throughs?
3. Does the level of eWalk use have an impact upon administrative perceptions to utilize the walk-through process as intended for formative evaluation?
4. Does the level of eWalk use have an impact upon administrative perceptions of themselves as the lead learner of the faculty?
5. Does the level of eWalk use have an impact upon changes in administrative perceptions and behaviors connected to the associated practices of the Balanced Leadership framework?

Significance of Study

Although there are increasing numbers of professional development opportunities, workshops, conference presentations, and articles addressing case study practices regarding classroom walk-throughs, there has been little formal research regarding walk-throughs and the impact upon administrative behavior (Kachur, et al., 2009). Furthermore, there is virtually no literature on how administrators use electronic evaluation technologies and tools to assist them in their efforts to impact instructional practices within the classroom to raise the level of student achievement. States and schools are finding it necessary to focus on altering classroom instruction and the student learning process to ensure that actual changes in practice within the classroom occur in order to impact significant changes in student achievement (Freedman, 2007; Hoy & Hoy, 2006; Kachur, et al., 2009). Increasingly, research is focusing on the degree that a teacher's instruction, the school, and the district's leadership practices influence student academic achievement (Marzano, Pickering, &

Pollock, 2001). The act of conducting classroom walk-throughs epitomizes the role of instructional leadership to improve teaching and learning (Cervone & Martinez-Miller, 2007; Granada & Vriesenga, 2008; Kachur, et al., 2009). Hence, a systematic method is necessary to collect and analyze the data gathered from instructional observations to ensure that teachers are effectively utilizing teaching practices that target all students. By conducting this research, there may be a collective benefit for administrators that deepens their understanding of how they utilize the walk-through process to improve instructional practices.

As schools transition into the 21st century, it is imperative that school administrators become powerful instructional leaders who direct the charge of personally working with their faculty to ensure academic achievement for all (Leithwood & Riehl, 2003; Wagner, 2008; Wagner, et al., 2006). The skills necessary for school leaders to work on effective professional development with teachers creates the demand for school administrators to become lead learners who will aid collaborative efforts in the process of teacher professionalization. This, in turn, necessitates ongoing evaluation to ensure that those practices are occurring in classrooms and that teachers possess the skills necessary to carry forth the initiatives. There needs to be an increased emphasis on the role of formative evaluation for professional development. When focusing on formative evaluation, the evaluation process will not be seen as merely a hoop-jumping process. Rather, educators should focus on the connections to professional development and personnel decisions while visualizing a sense of accountability for improving instructional practices (Mathers, Olivia, & Laine, 2008). Although the amount of literature surrounding classroom walk-throughs is growing, little is understood regarding how school administrators utilize classroom walk-

throughs in conjunction with electronic evaluation technologies and tools as data-gathering tools (Kachur, et al., 2009). By synthesizing how eWalk is used during classroom walk-throughs and its impact upon the role of instructional leaders as lead learners, this study will make an important contribution to teacher supervision, to teacher evaluation, and to educational leadership literature bases.

Summary

School administrators are changing their roles from that of managers to instructional leaders and lead learners; the role of classroom visits is shifting from a managerial act to one of classroom walk-throughs aimed at improving teaching and learning. School leaders working as the catalyst for improving student academic achievement must utilize a systemic approach to improving instruction and supervision. The purpose of this study is to examine the practices of building level principals' use of eWalk while conducting classroom walk-throughs. Specifically, the study will examine the relationship between the principal's level of use and self-reported perception of their purpose(s) for using eWalk during walk-throughs as a means for formative rather than summative evaluation and the impact of associated behaviors related to the functioning as a lead learner. Furthermore, the study will explore administrators' perceptions of their behavior-associated practices linked to the Balanced Leadership framework as a result of conducting classroom walk-throughs with the use of eWalk. Exploring how administrators use eWalk during their walk-throughs will shed light on how this practice transforms educational supervisory practices and the corresponding impact on leadership responsibilities. As the concern with improving student learning increases so too has the need for principals to allot more time to informal observations and to

develop processes to monitor and evaluate implementation of instructional practices. As expectations rise for administrators to function as the lead learners of schools, so too must principals alter walk-through practices to indirectly assist individual teachers and the instructional practices of the entire faculty to raise the level student achievement. This data gathered through the use of eWalk will allow for the administrators to engage faculty in meaningful and reflective discussions regarding the schools instructional practices. This study will contribute to the body of knowledge regarding informal observations, walk-throughs, and the related use of digital technologies to enhance these processes.

The second chapter in this dissertation reviewed the associated literature on EETTs and walk-throughs by framing them within the context of teacher evaluation, informal observation, instructional leadership, and administrators functioning as lead learners. The third chapter outlines the design and methodology of the study including the design of the survey, selection of participants, data collection instruments and process, data analysis, and the limitations. The fourth chapter discusses the results of the data collection and analysis regarding evaluation of the survey results. Specifically, subsections examined data regarding the general demographic information, professional development, self-reported responses to the perception for the purposes of summative evaluation, formative evaluation, and functioning as the lead-learner, the practice of conducting joint walk-throughs, the role concerning school leadership and improving professional learning community practices, sharing and analysis of the walk-through data results, and connections to the Balanced Leadership framework. The fifth chapter viewed the results in light of the literature, outlined the implications for practitioners, illustrated the potential impact for school improvement

efforts, delineated recommendations for purpose and function to inform policy and practices, outlined recommendations for future research, and illustrated how this study will further the research and literature regarding conducting classroom walk-throughs.

CHAPTER 2. LITERATURE REVIEW

The purpose of this study is to examine and understand the impact that eWalk, an electronic evaluation technology and tool (EETT), has on an evaluator's perception and behavior regarding the purpose and intent of the classroom walk-through process. This review of the literature explores previous theoretical frameworks and research studies related to the role of teacher evaluation and the supervisory practice of walk-throughs. Furthermore, this chapter examines the relatively novel concept of employing EETTs during the classroom walk-through process. Several related theoretical models and purposes for conducting walk-throughs are explored in light of the intended impact of administrators leading teacher learning in order to raise the level of student academic achievement.

Historical Summary and Perceptions of Teacher Evaluation

During the establishment of public education, the principal was often the most experienced teacher. The principal's responsibilities included carrying out a reduced teaching load, assisting with the managerial roles of school operations, and serving as the instructional leader for the other teachers (Sergiovanni, 2006). Historically, teachers were evaluated based on their moral fortitude, personal traits, and specific observable behavior (Iwanicki, 1998). Throughout the early 20th century the influence of scientific management and standardization further pushed the principal to embody the roles and responsibilities of an effective manager (Sergiovanni, 2006; Spring, 1997). In the 1950s and 1960s research on behaviorism emphasized standardized teacher behaviors that could be linked to student learning (Ellett & Teddlie, 2003). In the 1980s, the business world's model of Management By Wandering Around (MBWA) accentuated the role of a manager serving as an active supervisor to

oversee the daily operations(Peters & Waterman, 1982). This model found its way into the school system just as an increase in accountability was merging with teacher evaluations (Frase & Hetzel, 2002). Then, in the 1990s, the emphasis shifted back to having principals serve as instructional leaders equipped to meet the increasingly complex accountability demands based on federal and state mandates (Sergiovanni, 2006).

More recently, there has been a trend in the literature and, to an extent in practice, to stress teacher evaluation on the basis of student and teacher learning with the goal of improving both teaching and learning (Kachur, et al., 2009; Ovando, 2001). The shift from stressing merely observable teacher behavior presumes that the evaluator considers how the teachers are implementing professional development initiatives and appropriate strategies as they interact with students. Furthermore, teachers are now held accountable for creating the circumstances for students to learn and their role in facilitating what the student does throughout the learning process. As Whitaker (2008) conveyed, educators cannot be in the business of teaching anymore, but all must be in the business of learning. Therefore, administrators conducting walk-throughs must look for evidence of how teachers are facilitating student learning with an emphasis on formative evaluation for the purpose of teacher growth. Despite all types of educational reform efforts, the teacher evaluation system has been focused historically on the teacher and not the learner (C. Danielson & McGreal, 2000). The relationship between teacher methodology and student achievement and the increased focus on standards has generated a new era of educator accountability.

Era of accountability

Public education has been regarded as the country's great equalizer; all who come through its doors are given the same opportunity to equip themselves with the knowledge and skill-set necessary to compete intellectually in the workforce (Spring, 1997). Arguably, this is not the reality that is occurring in the nation's classrooms. To a great extent there are many outside variables affecting student achievement that are beyond the school's control. Due to the emergence of technology, there is an increasing globally competitive market and a workforce that goes beyond manual labor to include the need by corporations to have cognitive work done by those overseas (Friedman, 2006; Wagner, et al., 2006). An urgency to reexamine the impact of education upon the economic and national security has surfaced due to growing concern regarding the global economic market, out-sourcing, global warming, and a national economic recession. Technology has impacted nearly every facet of daily life. Therefore, there is a need to reexamine how schools ensure that our educational practices align with the cognitive demands of future jobs (Wagner, 2008). Competition is no longer local, statewide, or even national; rather, one is forced to compete within a global marketplace (Friedman, 2006; Wagner, 2008). The global marketplace includes nations such as India and China whose youth are increasingly English speaking and have a matching work ethic to go with the hunger for advancement. Therefore, a systematic method is needed to ensure that our teachers are effectively reaching all students in the classroom, and that they are implementing innovative initiatives that address the needs of the up and coming creative class that will serve as the basis for future jobs (Wagner, 2008; Wagner, et al., 2006).

Previously, teacher evaluation was seen as a managerial task concerned with efficiency and creating a standardized product. The political and intellectual climate of the early Cold War years influenced standardization of some of the academic delivery into scientific practices (Zhao, 2009). Later, in the 1980s, with an increase in the desire to standardize accountability, teacher evaluation was seen as a managerial task with a directive to assess teachers based on accepted practices (C. Danielson & McGreal, 2000). During the Reagan years, the seminal publication, *A Nation at Risk* (1983), revealed that the United States was intellectually falling behind global competition, and in turn shifted concern to evaluating the summative standardized academic achievement results of schools and comparing these results to global competitors (Wagner, 2008).

This fervor for highly qualified teachers in each classroom and for greater accountability for student academic achievement was renewed with the bi-partisan law known as the No Child Left Behind (NCLB) Act (2001) signed by President George W. Bush on January 8, 2002. Reauthorizing the Elementary and Secondary Education Act renewed the nation's focus on closing the academic achievement gap regarding disparities in performance on standardized test measures between sub-groups. In the era of accountability, the assumption was made that administrators will bear ultimate responsibility for improvement of instruction and student achievement (Freedman, 2007; Wagner, et al., 2006). It would be an erroneous belief to assert that one could simply mandate a change in instructional practices without providing on-going support and supervision (Freedman, 2007; Grubb & Flessa, 2006). As a result of NCLB (2002), it was mandated that professional development should improve teachers' content knowledge, provide the cornerstone for school and district

improvement plans, provide an on-going and intensive focus on how to impact classroom instruction and teacher's practices, and promote research-based instructional strategies to improve student academic achievement or the instructor's skills.

The pressures of accountability legislation promulgate states and districts to demonstrate proficiency on high-stakes standardized tests. Thus, instructional leaders must commit to supporting teachers' instructional practices and growth through on-going observations, data collection, and reflective conversations (Downey, et al., 2004; Johnston, 2003). It is no longer acceptable for school administrators to simply function as managers who are concerned with student discipline and the budget. Operating a school post-NCLB necessitates that educational practices, in particular evaluations and instructional leadership, must become an on-going and data-driven process that allows for reflective conversations between the evaluator and supervised teacher to center on student achievement (Granada & Vriesenga, 2008; Tracy, 1995; Wagner, et al., 2006). Therefore, evaluations must not be left simply to a summative report or a checklist completed once every three years. Rather, to ensure gains in student achievement, there must be an on-going professional dialogue centered on a teacher's individual professional development needs in light of the current district and student population.

The fear of penalty by failure to meet state and federal mandates for student academic achievement has pushed principals and districts to refocus professional development indirectly on improving student learning through teacher evaluation and establish the direction for collaborative conversations centered on learning. Despite all types of educational reform efforts, the teacher evaluation system has been focused on the teacher and

not the learner (C. Danielson & McGreal, 2000). Specifically, the focus of teacher evaluation has been on personnel decisions involving salary, tenure, personnel assignments, transfers, or dismissals, which broadly are categorized as summative evaluation. Nevertheless, the majority of research findings have revealed that a greater emphasis should be placed on providing feedback regarding needed professional development, or formative evaluation (Ellett & Garland, 1987; Loup, Garland, Ellett, & Rugutt, 1996). To ensure that a school is working toward meeting NCLB requirements, and that corresponding initiatives are properly implemented, administrators must become leaders who operate in a systematic, intentional, and purposeful manner to build capacity and provide the opportunity to increase student academic achievement.

Isolation of the teaching profession

Teaching is perhaps the most isolated profession wherein, on the first day, an individual's level of performance should be the same as the 25-year veteran despite added demands (e.g., remedial courses, more preps, and least desired but required courses). A doctor would not go into the operation room with such little guidance. Rather, there is plenty of observation, guided practice, and collaboration which enables the doctor to work incrementally toward solo performance of a surgery. Schools must break down the barriers surrounding teacher isolation; perhaps walk-throughs may provide a means to ensure that principals engage teachers in collaborative partnerships (Eisner, 2002; Ziegler, 2006).

In education, there is a declared "survival of the fittest." Ingersoll (2003) revealed that teacher attrition dropped from 40% of teachers who were not provided induction and mentoring, to 18% among those who had full induction and mentoring. Indeed, even with one

in five individuals leaving the field of education, further action is necessitated by school administrators to support and assist teachers. Alarming attrition rates, coupled with the advent of the "Baby Boom" generation of teachers beginning to retire, is creating a massive shortage in specific areas requiring highly qualified and effective teachers. Therefore, to address new teacher and overall attrition rates, many states and school districts have implemented programs and various safeguards to assist teachers. These programs, however, are often sporadic and one may easily question the fidelity of the implementation. For example, in Iowa many new teachers are assigned a mentor (hopefully within their respective department) during their first two years. In practice, the mentor only observes the mentee a few times, provides little feedback, and often has an inadequate understanding of the teacher evaluation system.

Despite many good intentions, mentoring programs are often seen as mere compliance initiatives; few genuine conversations occur and there is little ongoing coaching. Additionally, there is often little difference occurring in regard to the formative evaluation provided by an administrator to beginning teachers beyond assigning an individual teacher mentor. School leaders must take a more active role in placing teachers under their wings when assisting them to adjust to their new responsibilities. In turn, new teachers may become more able to handle the stresses associated with the life of an educator. One possible solution is for administrators to act in a supervisory capacity (formative evaluation), and not to be seen as the fearful evaluator (summative evaluation), which is a typical perception (Nolan & Hoover, 2005).

Not only is there an issue with attrition rates of new teachers, but concern also rests with the retention of veteran teachers who may not be equipped with the skills necessary for

learning in the 21st century. This may have devastating impacts on the ability to produce an effective workforce for a global economy. Functioning as the lead learner implies that administrators lead collaborative efforts for professional development and ensures that a learner-centered education occurs in every classroom. This, in turn, necessitates on-going evaluation to support and ensure that those practices are occurring in the classrooms and that the teachers posses the skills necessary to carry forth the initiatives.

The act of conducting walk-throughs on a regular basis increases the rate of administrator visibility in the classrooms and creates the environment for an administrator to foster professional relationships with the faculty. Indeed, many new teachers, as well as mid-career teachers, leave education due to a dissatisfaction with their teaching careers and experiences in school (Ingersoll, 2003b). Having school leaders focus on instructional leadership early on may be the ounce of attrition prevention that teachers need. At the same time, following the exhaustive support typical of formative evaluation, the principals may coach those teachers who do not initially seem to be effective in the classroom. Indeed, in the era of accountability to foster student academic achievement, the role of an administrator will be to serve the multiple roles of manager, leader, coach, and mentor (Johnston, 2003).

Supervision: Purpose of teacher evaluation

In a recent Regional Educational Laboratory technical brief (Examining District Guidance to Schools on Teacher Evaluation Policies in the Midwest Region), an examination of the state teacher evaluation policies of seven states in the upper-Midwest was conducted to understand what was systemically being done to ensure academic achievement through each state's teacher evaluation system (Brandt, Mathers, Brown-Sims, & Hess, 2007). In order to

classify the 13 characteristics of the teacher evaluation procedures, the characteristics were grouped into three categories: (1) teacher evaluation standards and criteria of teacher practice or performance; (2) teacher evaluation processes, and (3) teacher evaluation results. The findings revealed that, despite the rhetoric regarding academic achievement, little is being done across each state to systematically provide guidance to districts on existing policies. In the Midwest, the state of Iowa was rated as the strongest, with eleven of the thirteen state policy characteristics in place; Minnesota only had two of the thirteen characteristics.

Teacher evaluation systems for states such as Iowa were designed to provide a framework and structure to guide teachers as they refine their practice and to provide a common language and a new vision of the complexity of teaching as they embrace the necessary changes in the professionalization of the field (Iowa DOE). A recent initiative in Iowa classified teachers into career ladders (i.e., Beginning, Career, Master Educator, Intensive Assistance) in order to delineate the frequency of observations and paperwork that must be completed for compliance with district-negotiated formal evaluation procedures for the purpose for summative evaluation (Iowa DOE). Iowa has instituted the Iowa Student Achievement and Teacher Quality model that requires each veteran teacher (typically those with more than two years of experience) to annually complete an Individual Professional Development Plan; here obtaining growth is the concern and wherein an individual can focus on certain standards. Unfortunately, the emphasis in teacher evaluation systems has been the summative aspect for mere compliance for the personnel records whereby teachers may utilize a portfolio to supply artifacts along with the one classroom observation conducted by an administrator (Heneman & Milanowski, 2004).

These new teacher evaluation systems are rooted in teacher and school effectiveness research (Ellett & Teddlie, 2003). Despite the intent of teacher evaluation systems to clarify the roles and expectations of teachers, many teachers continue to resist the process as it is perceived to be implemented inconsistently by administrators. Moreover, there are questions as to the qualifications of the evaluators to effectively and consistently implement the process in a fair and equitable manner (C. Danielson & McGreal, 2000; Milanowski & Heneman, 2001). One must keep in mind that external and consistent evaluation is still a rare occurrence within a classroom; thus, teachers continue to be skeptical an outsider's ability to provide meaningful feedback (Milanowski & Heneman, 2001).

As federal and state mandates regarding teaching standards and curricular initiatives are enacted, it will be increasingly important for the administrators to increase both time and energy into the evaluation process because a clear link has been defined between teacher practices and rises in student achievement (Marzano, et al., 2001). The new teacher standards by which faculty will be assessed will require professional development to aid an individual to acquire new required skills to address weaknesses in practice (Kimball, 2002).

As previously stated, there is a greater emphasis on teacher evaluation regarding the improvement of student and teacher learning (Kachur, et al., 2009; Ovando, 2001). Moreover, the belief that evaluations appear to be extremely subjective and that they resemble one-shot formal classroom observation leads to the perception of a "dog and pony show" where these walk-through evaluations become an event rather than an on-going process. To counter the single observation practice for evaluations in place of on-going evaluations, many states and districts have moved to culminating teacher portfolios.

Portfolios may function as a means for a teacher to gather artifacts to provide evidence that they have met the appropriate teacher standards and criteria to prove proficiency (Tucker, Stronge, & Gareis, 2002). Concern, however, rests with the validity of portfolios reflecting typical classroom practices (Tucker, et al., 2002). Despite many good intentions most teacher evaluation systems are seen as mere compliance procedures; little genuine conversation and on-going coaching occurs under most evaluation systems. Within the era of accountability, evaluators must be far more concerned about student achievement as a result of what the teacher is doing in the classroom.

Danielson and McGreal (2000) offered the following four suggestions to improve teacher evaluation practices: (a) a comprehensive description and purpose for the system (competency model); (b) explicit standards and multiple levels of performance (rubric rating scales); (c) increased frequency of observations in the classroom and multiple sources of evidence, and (d) trained evaluators. When using a rating scale there may be a certain level of performance that is deemed below proficiency. Using EETT's that have the capabilities to utilize Likert scales that have moved beyond a "yes or no" response, the evaluator can provide justification and evidence for the rating that can spur the crucial conversations and feedback that will facilitate changing practices.

The Danielson and McGreal (2000) three-track supervisory model has been adopted by many districts in the state of Iowa; where beginning teachers are placed on Tier I, veteran teachers are placed on Tier II, and experienced teachers needing intensive assistance are placed on Tier III by the supervising administrator. The major emphasis regarding supervision of Tier I teachers is that the evaluator is attempting to determine whether or not

to retain the teacher (summative evaluation). There are both formal and informal observations that may be used for informing contractual decisions. Novice teachers work to collect artifacts over the first two years to illustrate to the evaluator how they are making progress on the eight teaching standards consisting of forty-three criteria. There is a final summative conference where the administrator reviews the work with the probationary teacher to determine whether there will be a recommendation for standard licensure, a third year on Tier I evaluation, or no recommendation for licensure. Under the Tier II category, where most experienced teachers reside, work is done with an Individual Professional Development Plan (IPDP) to provide a professional growth plan for the teacher based upon desires and needs that are agreed upon by both the teacher and evaluator. In practice, there is a more collegial relationship that is characterized by an on-going conversation about the art and science of best practices for teaching versus the typical events surrounding the timeline in the negotiated agreement. In light of the increased collegial relationship, especially in the era of accountability with the pressures of AYP, walk-throughs offer evaluators a chance to work and continually promote the growth of experienced teachers (Keruskin, 2005). Tier III is reserved for the few veteran teachers who are not meeting district expectations. The goal of placing a veteran teacher into an intensive assistance plan is to create a growth plan where the administrator may work to bolster the teacher's skill-set to meet the needs and expectations of the district. It should be noted that if a teacher does not make adequate progress, then the next step would be for an administrator to begin terminating the teacher's contract.

Formative vs. summative evaluation

Teacher evaluation has two main intents: one being for summative evaluation and the other for formative evaluation (Gareis, 2007). Summative evaluation is generally completed for personnel records and decision-making regarding retaining and firing personnel. The intent of formative assessment is to occur as "part of" instruction with the purpose "for" learning, where constructive feedback is given and fosters involvement of the learner (Gareis, 2007). In other words, when applying these concepts to formative evaluation, the intent is to be used "for" teaching and coaching the teacher while engaging in meaningful conversations about what is needed for the teacher and faculty in terms of professional development. Generally, it has been the summative role of teacher evaluation that has been emphasized as most administrators operate as school managers versus lead learners.

Summative evaluation is still seen as conflicting with formative evaluation, as the perceived emphasis upon summative is for contractual purposes whereas formative evaluation is for professional growth of the educator's practices (Gareis, 2007; Glickman, Gordon, & Ross-Gordon, 1998; Ovando & McCleary, 1991a, 1991b; Stronge, 2006). Research by Marzano et al. (2001) on the impact that a classroom teacher has upon a student's academic achievement dictates that a school leader's emphasis must be upon systematically improving the substance of what is occurring within the classroom as well as teacher competence. In turn, this evidence demands further examination on how to improve the Teacher Evaluation Systems (C. Danielson & McGreal, 2000).

In a recent analysis of Teacher Evaluation Systems, Brandt et al. (2007) found that evaluation results are used to: inform personnel decisions (60 %); suggest instructional

improvements (39 %); inform professional development goals (28 %); and for remediation (12 %). Thus, the prevalent usages of teacher evaluation systems are still for summative purposes, and not for formative evaluations to improve instruction and academic achievement. Some have argued for the separation between the roles of an evaluator for administrative personnel issues (summative) and developmental coaching for instructional improvement (formative) (Hazi, 1994; Ilgen & Feldman, 1983). Milanowski (2005) concurred with the notion that there is no significant impact in teacher perception regarding whether or not the roles of the evaluator are separated or combined; rather, teachers care more about the coaching and assistance provided during these evaluations.

In the era of accountability, post-NCLB, educational practices (including evaluations) must become an on-going and data-driven process that allows for participation and reflective conversation by both the evaluator and supervised teacher centered on student achievement. Therefore, evaluations must not be simply left to a summative report or a checklist completed once every three years. Rather, to affect student achievement gains, there must be an on-going professional dialogue centered on individual professional development needs in light of the current district and student population. Walk-throughs conducted with the utilization of EETT provide an evaluator with a tool and a means to facilitate a systemic and data-driven practice to aid the administrator in orchestrating the faculty's individual and collective learning needs.

Walk-through models

As principals work to actively monitor and observe teachers as a means of formative evaluation, this active presence and associated behavior has been linked to increased student

achievement (Cotton, 2003). Principals concerned with improving student learning frequently examine the instructional practices taking place and work to provide constructive feedback that initiates reflective thought regarding the lesson. The rationale for dedicating a large amount of time and energy to this practice is to ensure that one uses the typical managerial role of supervision toward pursuing higher academic results. Walk-throughs are typically short and frequent informal classroom observations that enable administrators to examine the instructional practices and circumstances surrounding the learning process that impact student academic achievement (Bushman, 2006; David, 2007; Downey, et al., 2004; Granada & Vriesenga, 2008; Larson, 2007; Skretta, 2007, 2008; Skretta & Fisher, 2002; Zepeda, 2008). Although walk-throughs are rooted in the managerial practices originating from MBWA, the practice has evolved from a managerial focus to that of a learning leader who utilizes these informal classroom observations to center attention on teaching practices and student learning.

Although the study will provide the initial research on the utilization of eWalk and electronic evaluation technologies and tools (EETT) for teacher evaluation, there is a growing amount of literature on the walk-through process (Downey, et al., 2004; Freedman, 2007; Kachur, et al., 2009; Skretta, 2008). Classroom walk-throughs function as the mode to emphasize instructional leadership practices that are placed as a priority to improve teaching and learning. There is a need to increase opportunities for meaningful communication between the evaluator and evaluatee. Zepeda (2002) contended there needs to be improved communication regarding evaluation policies and procedures. It would be reasonable to assume that trust between the evaluator and evaluatee would increase with more on-going

communication; correspondingly, more collegial open communication surrounding educational practices would occur. For student achievement to increase, a commitment must be made to ensure frequent observations take place where data can be compared. The various walk-through models purpose allocating and scheduling a substantial amount of a principal's time to ensure enough information is obtained to inform professional development (Downey, et al., 2004; Kachur, et al., 2009; Larson, 2007; Skretta, 2007; Zepeda, 2008). Rooting the walk-through process in data-driven decisions leads to the need for an electronic tool and a system to assist in the teacher evaluation process.

School Management by Walking Around

The business world's managerial philosophy and practices have influenced educational practices over the past 100 years. Research on effective management techniques led Peters and Waterman (1982) to write and outline a proposal, *In Search of Excellence: Lessons from America's Best-Run Companies,* for the Hewlett-Packard company that would be known as Management by Walking Around (MBWA). The MBWA model was designed as a managerial tool for managers in factories and businesses; daily interaction with the workers gave the managers insight into organizational trends in the strengths, weaknesses, and needs (Frase & Hetzel, 2002). It is through the increased formal and informal interaction with employees that a supervisor allows for the opening of communication and dialogue with the employees (teachers) and customers (students) (Frase & Hetzel, 2002; Kachur, et al., 2009). It was the goal for managers to spend a great deal of their time among the workforce to understand the complexities of their jobs, their needs, and their motivations. As Rossi (2007) stated, "Caring, openness, and trust are the key values in employing MBWA, but

being visible in the workplace and communicating to workers is what drives this supervisory approach." (p. 31).

In 1990, Frase and Hetzel (2002) first applied the MBWA concepts to schools with the purpose of principals to increase their visibility in classrooms and utilize: (1) "lookfors" to provide a focus for improving instruction; (2) maintain student order and discipline; (3) manage time allocated to walk-throughs; and (4) and to ensure facilities are safe and conducive to learning (Kachur, et al., 2009; Keruskin, 2005). Increased visibility and frequency of interaction enables a leader to foster an environment where faculties perceive that administrators are approachable and willing to communicate the needs of the organization. Applying the principles of MBWA during walk-throughs focuses on the summative evaluation where the intent of observations is on inspection and judging what is seen for compliance with personnel evaluations.

Downey Three-Minute Classroom Walk-Through

In the Three-Minute Classroom Walk-Through, the walk-through has been broken down into a quick process where educational researchers and practitioners require a scientific means to compile qualitative data efficiently (Downey, et al., 2004). In contrast to MBWA, the Downey format emphasizes the formative function of evaluation for "coaching" with follow-up conversations for reflection (Brooks, Solloway, & Allen, 2007; Downey, et al., 2004). In the five key ideas: (1) walk-throughs are short and focused informal observations; (2) possible areas for reflection are identified for the teacher; (3) data are gathered regarding curriculum and instruction as well as the impact on student behavior; (4) follow-up

conversation occurs only on occasion; and (5) an informal and collegial approach is maintained throughout the process.

Downey et al. (2004) proposed that principals look for the 3-Cs - Content, Context and Cognitive type - throughout the walkthrough process. This necessitates that the administrator examines his/her instructional leadership capacity and seeks personal professional development to gain competence in guiding curricular innovation. Following the walk-through, evaluators will make note of the student orientation to the work, the presence of a variety of curricular decision points, instructional decision points, walk-the-walls (curricular and instruction decisions), and evidence of any safety or health issues (Downey, et al., 2004). Student orientation to the work takes place as the administrator enters the room to determine a feel for the level of student engagement and to discern any reason for behavioral disruptions. Curricular decision points are where the observer is looking for descriptive evidence of the objectives taught within the lesson. The work ensures alignment of the intended and enacted curriculum. Instructional decision points focus on the teachers' selected strategies to convey the curricular objectives for the lesson. Walk-the-walls enable the observer to seek evidence from past curricular objectives and/or instructional practices. Safety and health issues remain as the typical managerial role for ensuring that the environment is conducive to learning.

Written feedback is not provided to teachers as the emphasis is upon the collegial dialogue between principals and teachers. The feedback provided is based on frequent observations over time that allow for periodic collegial conversations to occur where the evaluator engages the teacher in a reflective practice.

LearningWalk

At the University of Pittsburgh, professors Otto Graf and Joseph Werlinich spurred the growth of the Western Pennsylvania Principals Academy as part of the Institute for Learning (Keruskin, 2005; Rossi, 2007). The main intent of the LeaningWalk is for the observers to be the primary learners who are assessing the teaching and learning practices occurring within the classrooms (Downey, Steffy, Poston, & English, 2010). During the process of visiting each class for 10–15 minutes, principals, district administrators, teachers, and others will look for the level of student engagement, assess visual displays, seek evidence of student learning from dialogue with students and student work (Keruskin, 2005; Rossi, 2007). The data gathered from the classroom walk-throughs enable the group of observers to debrief their observations and help not only to provide commentary to be posed for reflection by the teachers observed but also frame the focus for future LearningWalks. The benefits of conducting a LearningWalk include a concerted focusing on instruction and learning, focusing upon learning for all school stakeholders, and fostering data and conversation to further professional growth opportunities (Keruskin, 2005; Rossi, 2007).

Informal Classroom Oobservations

Zepeda (2008) provided administrators with 40 Classroom Observation tools to serve as templates to assist framing the purpose for informal classroom observations. Zepeda contended that longer observations (15–20 minutes) provide the opportunity for administrators to record and provide context-specific information to teachers regarding their instruction. Observations that record data assist in framing follow-up conversations to enable job-embedded discussions around instruction and learning.

Skretta and Fisher (2002) proposed a walk-through model that stresses the role of administrators to prioritize the behavior of conducting informal observations as a means for instructional leadership to improve student achievement. The model has five key characteristics:

1. Develop and use a common language for quality instruction;
2. Establish clear and consistent expectations for the administrator's presence in classrooms and communicate these to staff members and school community;
3. Schedule informal walk-through observations as you would any other important item on your calendar;
4. Use walk-throughs to promote dialogue with teachers; and
5. Share anecdotal feedback from your walk-throughs with your faculty.

Emergent in practice is for administrators to use a variety of forms that allow for feedback to be recorded in order to provide a written report along with the collegial conversations that take place (Bushman, 2006; Skretta, 2007, 2008; Skretta & Fisher, 2002).

"Look-fors"

Walk-throughs present the opportunity for evaluators to collect a large amount of observational data regarding the instructional practices and behaviors associated with student learning (Cervone & Martinez-Miller, 2007; Granada & Vriesenga, 2008; Kachur, et al., 2009; Skretta, 2007). Most teacher evaluation instruments examine broad common areas including a variety of forms for the verbiage: content knowledge, instruction, planning and preparation, student assessment, monitoring and evaluation, classroom management, professional ethics and development, and personal qualities (Milanowski & Heneman, 2001;

Munoz & Davis, 2007). Although these are appropriate areas for administrators to examine, the larger issue rests with narrowing the focus of observations regarding the impact of instruction upon the student learning. Increasingly, an emphasis is placed upon multiple sources to reflect the student academic achievement by examining lesson plans, student work, and assessments. Walk-throughs offer the ability to focus upon specific evidence known as “look-fors” and “listen-fors” (Granada & Vriesenga, 2008; Pitler & Goodwin, 2008; Using the classroom walk-through as an instructional leadership strategy," 2007, February). In order to ensure a teacher’s openness to administrators conducting classroom walk-throughs, it is beneficial to establish clarity regarding the purpose, focus, language, and criteria for look-fors (Kachur, et al., 2009; Keruskin, 2005; Rossi, 2007; Using the classroom walk-through as an instructional leadership strategy," 2007, February). Regardless of the criteria examined in the process of conducting walk-throughs, the evaluator is able to take note of a series of visits to a classroom where particular practices and/or behaviors are observed. Walk-throughs provide the opportunity to offer feedback that focus on specific items and/or derived from general themes overtime.

Need for walk-throughs

Administrators must move their focus beyond structural changes and impact that instructional practices within the classroom in order to improve student academic achievement (Elmore, 2000). Emerging from the literature is the dispute between the use and non-use of checklists and other formats to record notes from classroom observations (Downey, et al., 2004; Zepeda, 2008). Over time, frequent visits to classrooms offer the instructional leader seeking trends an opportunity to collect data and collaboratively work

with teachers to examine how to improve instruction. Conducting classroom walk-throughs has become an increasingly popular practice for school administrators as there is a growing emphasis upon instructional leadership, professional learning communities, data-driven decision making, No Child Left Behind, standards-based curriculum, implemation of new curriculum and instructional initiatives, the shift from teacher-focused to learner-focused supervision, and the increasing role of coaching and mentoring teachers (Kachur, et al., 2009). Each of these roles have necessitated the need to focus energy not only to conduct the practice of classroom walk-throughs, but also to increase the tools to equip one to be able to collect data and, as a result, engage in meaningful learning experiences (Granada & Vriesenga, 2008; Kachur, et al., 2009). Using the walk-through process has enabled schools to gather data indicating the degree of implementation of professional development initiatives and the impact upon instruction and student learning, while beginning to engage the faculty in reflective dialogue (Blatt, Linsley, & Smith, 2005). Unfortunately, in practice many administrators who are consistently completing walk-throughs do not have the time to properly compile the data; therefore, they are unable to engage in any meaningful conversations beyond a one-on-one conversation about a specific time, lesson, and context (Larson, 2007). Therefore, a major benefit of to an evaluator in using the new EETT is the technology's effectiveness to compile data, categorize, summarize, and examine trends (Granada & Vriesenga, 2008; Kachur, et al., 2009). Moreover, EETT is an effective tool to assist the evaluator to place the emphasis on conducting classroom walk-throughs and an emphasis upon the creative and critical thinking skills necessary for lead learners to engage their faculty in reflecting upon the data to spur continuous improvement (Cervone &

Martinez-Miller, 2007; David, 2007; Granada & Vriesenga, 2008). It is important to have tools as well as a trained mind to engage in the data-driven decision making process. Thus, basing the walk-through process in data-driven decisions drives the need for an electronic tool and system to assist in the teacher evaluation process.

Electronic Evaluation Technologies and Tools (EETT)

The major reason for embracing electronic evaluation technologies and tools (EETT) is that it enables administrators to quickly collect and analyze large amounts of observation data (David, 2007; Granada & Vriesenga, 2008; Kachur, et al., 2009). By using a common rubric and tool, "The walkthrough may equip principals with a school-wide, commonly used tool and language for organizing the diverse insights gained about teaching and learning as a result of these informal observations" (Skretta, 2008). There is a need for schools to adopt EETT. Principals can use EETT to organize and compile the data to aggregate and disaggregate trends in the school's instruction and student learning process (Granada & Vriesenga, 2008; Larson, 2007). Although effective conversations can take place between the evaluator and the classroom teacher without EETT, these conversations are limited to what was seen at a specific time in the classroom. With the use of EETT an evaluator may compile data to easily note trends regarding an individual teacher and/or the larger faculty, as in seeing the details as they merge from a larger picture. There are several states, such as Iowa, where Department of Education has engaged in an extensive contract with Media-X Systems to install and utilize eWalk software (Media-x, 2008). The primary goal for applying eWalk software is in the walk-through component of teacher evaluation, where formative evaluation can be used for coaching. The ease of using this technology enables the administrator to transform the

typically managerial task of evaluation to provide on-going instructional leadership demanded by the mandates for greater accountability.

Media-X Systems' eWalk software is a web-based program that synchronizes with hand-held Personal Digital Assistants (PDA's), mobile telephones, or portable mini-laptops to collect and upload the data gathered from classroom walk-throughs (Granada & Vriesenga, 2008; Kachur, et al., 2009; Media-x, 2008). To further describe the process, the user selects from a created rubric a standard, then criteria, and rates the degree to which the attribute is being met. Then a commentary is composed as the user enters key phrases or pre-built comments (sentence library) to maintain an on-going narrative report. The software can accommodate a keyboard on the PDA or when synchronizing with the personal computer, which enables the evaluator to add additional commentary and feedback (Granada & Vriesenga, 2008; Kachur, et al., 2009). Through using electronic templates and Likert scales, each district has the ability to develop customizable rubrics and provide a summative narrative when including the commentary to form a summative report that accompanies the software-generated data spreadsheets (Media-x, 2008). The reports allow for a paperless, electronic process where the administrator can manipulate statistical analysis of the data through using previously designed or custom reports. One can export these data into spreadsheets such as Microsoft Excel to design reports using the program's graphic tools. Some electronic walk-through technologies such as the eWalk and Mobile-Principal have the means to e-mail back the data and comments to each teacher following the administrator's review of the data ("Austin Sky," 2008; Granada & Vriesenga, 2008; Media-x, 2008). All of these processes ensure that quick feedback is given which provides the opportunity for two-

way communication regarding on-going observations where teachers may respond and engage in their own analytical and reflective process (Downey, et al., 2004; Granada & Vriesenga, 2008; Skretta, 2007).

Products

Several companies have produced electronic evaluation technologies and tools, including Media-X Systems that markets mVal and eWalk, as well as Austin Sky that has developed Mobile Principal ("Austin Sky," 2008; Media-x, 2008) (see Table 1). Media-X Systems (2008) has developed and marketed the products of mVal for summative evaluation and eWalk whose primarily focus on the walk-through component of teacher evaluation where the main purpose is formative evaluation for coaching. Mobile Principal has the technology to integrate these various roles, as it allows for the merger of the teacher evaluation system components, both walk-throughs (formative evaluation) and formal observations (summative evaluation), with the student information system ("Austin Sky," 2008). Nevertheless, the Media-X Systems eWalk software program has the greatest adaptability for the user to customize and create as many templates to generate reports across platforms (Media-x, 2008).

Benefits of Conducting Walk-throughs with EETT

The on-going practice of monitoring and evaluating classroom practices may ensure that systemic efforts are being implemented across a school to raise the level of academic achievement for all students. Recently, classroom walk-throughs have been conducted to improve student academic achievement with the instructors' focus on evidence of teaching and learning; furthermore, walk-throughs using eWalk (EETT) ensure that data are collected

to allow for reflective conversations with individual teachers as well as to foster data-driven Professional Learning Communities (Cervone & Martinez-Miller, 2007; Granada & Vriesenga, 2008; Kachur, et al., 2009; Skretta, 2007; Using the classroom walk-through as an instructional leadership strategy," 2007, February). As professionals, most teachers are open to engaging in reflective discussions about pedagogy and best practices within their classroom (Downey, et al., 2004). These conversations, however, are likely to break down without the data and specific feedback regarding what was observed and trends versus mere "drive through" observations (Cervone & Martinez-Miller, 2007; Skretta, 2007; Using the classroom walk-through as an instructional leadership strategy," 2007, February). As time passes and walk-through data are compiled, the "snapshots" will begin to create a larger picture enabling the leader to analyze individuals or larger groups for strengths and areas for improvement (Cervone & Martinez-Miller, 2007; Ginsberg & Murphy, 2002; Kachur, et al., 2009; Larson, 2007; Richardson, 2006). Therefore, the data collection now possible with the EETT may allow for early detection of detrimental teaching practices; in turn, enabling the evaluator to focus on the specific area of concern to be addressed in his/her conversations. The needed consistency in teacher evaluations can be maintained by a combination of electronic templates and appropriate training. By engaging in an on-going and systematic process for collecting data through observations and walk-throughs, it will be clear to the evaluator which teachers need assistance and the areas that need instructional support (Cervone & Martinez-Miller, 2007; David, 2007; Granada & Vriesenga, 2008; Kachur, et al., 2009).

Table 1. Electronic Evaluation Technology and Tool (EETT) product comparison

Product Title/ Company/URL	Price	Platform(s) – Hardware	Integration with Student Information System	Formative Evaluation/ Summative Evaluation	Brief Description
Mobile Principal - TESA Austin Sky Technology http://www.austinsky.com/	$3380 MP/ $2700 TESA per campus- 1st Year *$530 yearly fee	PDA Smart Phone's Laptop/PC	Yes – Most SIS	Both	Useful for both walkthroughs & full observations& evaluations of teachers or any other personnel. The software is completely customizable to your rubrics. May quickly generate reports & graphs from the data.
mVal Media-X Systems Inc. http://www.media-x.com/products/mval/index.php	Annual Fee ranges from $250 - $140 dependent upon number of users +Training Fee	PDA Smart Phone's Laptop/PC	No	Summative	mVal includes a handheld client that supports both a scripting or scoring approach to classroom observations. It also includes a walk-through component, anecdotal notes, checklists, etc.
eWalk Media-X Systems Inc. http://www.media-x.com/products/ewalk/index.php	Annual Fee ranges from $225 - $125 dependent upon number of users +Training Fee	PDA Smart Phone's Laptop/PC	No	Both	Use data collection system to collect, analyze & store data directly through web-based forms, or download a data collection template to your handheld PDA to record observations using various input elements including pull-downs, checkboxes, numeric entry, text entry, etc.
PowerWalkthrough MCREL http://www.MCREL.org/powerwalkthrough	Seminar & Software $650 (includes individual software license) $500 connection fee per site/building (unlimited users) $250 software license fee for each user/year $45 user's manual for each user	PDA Smart Phone's Laptop/PC *Web-Based	No	Formative	The software helps one to focus observations on effective instructional strategies, student engagement, teachers' use of technology, & other factors that research shows to influence student learning based on *Classroom Instruction that Works*. Primary purpose is for formative evaluation to monitor the implementation of professional development and instructional strategies.
Teacher Evaluator Rediker Software Inc. http://www.rediker.com/teacher_evaluator.html	Per Pupil Pricing <300 students - $1000 300-400 students - $1250 400+ students - $1500 -Unlimited Adminstrators	PDA Smart Phone's Laptop/PC	Yes – only Rediker's	Summative	Customizable evaluation criteria& rating scales for integrating observations into reports and evaluations. Module built to work with SIS or as a separate database. Ability to add evaluations into staff & faculty portfolios (Release June 2009)
The Administrative Observer Preferred Educational Software http://www.pes-sports.com/pe06000.htm	Standard version - $295 Professional version - $495 Handheld - $99.95 *One time licensing Fee per building	PDA Smart Phone's	No	Standard – Summative Professional - Both	Deliberately designed to support standards-based observations and walkthroughs. The standard version supports observations that may be used for summative evaluations, while the professional version also includes the ability to conduct data analysis for formative evaluation purposes.

The data gathered from classroom walk-throughs will also help frame discussions with faculty to assist school leaders to function as better instructional leaders for their schools (Rossi, 2007). Furthermore, it is not enough to merely conduct classroom walk-throughs and collect data; rather, as instructional leaders the data must be the catalyst for school improvement and individual professional growth (Blase & Blase, 2000; Cervone & Martinez-Miller, 2007; Rossi, 2007). With the ability to utilize technology to categorize, summarize, and examine trends, the administrator can now engage the administrative team, the entire faculty, small groups and individual teachers in purposeful conversations (Cervone & Martinez-Miller, 2007; David, 2007; Granada & Vriesenga, 2008; Kachur, et al., 2009; Skretta, 2007). The University of California Los Angeles School Management Program utilizes classroom walk-throughs to drive a school's cycle of continuous improvement by focusing data gathering upon the effects of instruction (Cervone & Martinez-Miller, 2007). In turn and in line with the spirit of Professional Learning Communities, conversations with faculty members may center on the necessary professional development needed to move the school forward regarding needs for student academic achievement (Cervone & Martinez-Miller, 2007; Kachur, et al., 2009).

Formative evaluation and data collection must be systematic, as well as organized effectively and linked with relevant research and to lay the framework for conversations that examine professional development needs and areas of strength. To deepen the conversation, teachers need to complete the typical evaluation forms for self-assessment/reflections (post-observation forms and/or portfolio) to use with the evaluator's data and reports. It is important to continually emphasize the need to train evaluators in the skills to conduct effective observations and provide constructive feedback. Evaluations can be augmented by using effective electronic software and tools that enhance the effectiveness of the observations. A benefit of using

electronic templates with meaningful training is to standardize much of the practice in order to provide the needed consistency for teacher evaluations. Electronic templates can be embedded with a framework to ensure that vital data-driven conversations are occurring. This technology will be the tools through which school leaders improve the teaching performance and, in turn, improve student academic achievement in their schools.

The ease of the technology enables the administrator to transform the typically managerial task of evaluation into an on-going instructional leadership role to improve student academic achievement in their schools (Granada & Vriesenga, 2008; Kachur, et al., 2009). In the past, the data collected from a walk-through were rarely communicated back to the teacher(s) who were observed, and a few simplistic comments were provided as performance feedback. At times, a more ambitious principal would spend hours tallying data from multiple observations of a single teacher or the entire faculty. In their role as instructional leaders, administrators often spent an inordinate amount of time performing managerial tasks to compile the data (Larson, 2007). With new technology, an evaluator may leave the room and, within seconds, generate various reports that disaggregate the data that were just collected (Kachur, et al., 2009; Media-x, 2008). This, in turn, enables the principal to devote more time and energy leading the teaching and learning efforts of individuals as well as groups of faculty.

Anchoring monitoring and evaluation practices in the ongoing practice of classroom walk-throughs allows for utilizing a systematic process to collect data through observations that, in turn, may align systemic efforts to be implemented throughout a school to promote academic achievement for all students (Cervone & Martinez-Miller, 2007). Electronic evaluation technologies and tools (EETT) standardize the process and embed a framework to ensure that vital data-driven conversations may occur. As professionals, most teachers are open to engaging

in reflective discussions about pedagogy and best practices within their classroom (Downey, et al., 2004). These conversations will break down, however, if they lack the data and specific feedback regarding what was observed and data trends or mere "drive through" observations. New electronic technologies are the tools of the 21st century by which school leaders can improve the teaching performance and, in turn, improve student academic achievement in their schools by ensuring that early intervention will occur.

Administrators as lead learners. The accountability agenda in education, highlighted by NCLB, necessitates that administrators take responsibility for poor results and work to focus on enhancing the instruction of the teachers as a means to improve student performance. Thus, evaluators need to sharpen their own instructional leadership skills (DuFour, 2002; Leithwood & Riehl, 2003; Ruebling, Stow, Kayona, & Clarke, 2004). Instructional leadership is where the administrator works to create the conditions that foster work toward improving student academic achievement (Elmore, 2000). Marzano et al. (2005) argued that the single most important influence on a student's academic achievement is the quality of the classroom teacher, followed by the leadership of the principal.

Not only must leaders must possess knowledge of curriculum, instruction, and assessment, but they also must work actively to create a unified vision for the school, define a plan of action for improving and sustaining academic growth, work to understand the individual and collective needs of the teachers, structure the schedule and day to be conducive to the learning needs, and set-up professional learning communities, and encourage the needed collaboration for teachers to build their skill-set (DuFour & Marzano, 2009). Therefore, it is important to examine how administrators are utilizing eWalk (EETT), and its impact on the function of the evaluation process to assist in functioning as the lead learner.

Instructional leadership. Indeed, the role and emphasis of attributes sought in an administrator have changed over the past few decades as leadership has moved away from its managerial characteristics (Johnston, 2006). However, reality would indicate that most principals still spend the majority of their time dealing with managerial issues that are necessitated by the position (Miller, 2001). Within the accountability era an administrator will not only manage personnel, but also mentor and coach teachers to ensure successful implementation of instructional practices and assessment of professional development needs. Smith and Andrews (1989) noted that principals function as the instructional leader in the areas of resource provider, instructional resource, communicator, and a visible presence. Principals as instructional leaders must utilize their role as the manager of the school to allocate money and human resources for the purpose of improving student academic achievement. Marzano et al. (2005) purported that the multiple roles of an administrator have a significant positive correlation with student academic achievement. Foremost among the responsibilities of an instructional leader is the role assisting teachers in identifying issues and needs, providing guidance to teachers, actively supervising instruction, working on teacher evaluation, implementing appropriate professional development, and working to direct curricular development (Sergiovanni, 2006). In order to serve the multitude of diverse learning needs for a school's faculty, a principal must not remain in his/her office, but circulate throughout the building, entering classrooms to conduct walk-throughs in order to keep pace with the instructional practices, assess the teachers' needs, and engage in conversations about student learning(Granada & Vriesenga, 2008; Skretta, 2007).

To break down the extreme isolation found in the teaching profession and move away from the "sage on the stage" teaching practices that stress memorization of large amounts of knowledge and the effective regurgitation of that content, evaluation for change in instructional

practices must change as well. Shinkfield (1994) outlined the importance of teacher evaluation as it relates to improvement of instruction program, teaching practices, student performance, and professional development. Glickman (2002) classified developmental supervision and instructional leadership behaviors of the administrator into four categories including nondirective, collaborative, directive-informational, and directive control. Nondirective supervision occurs where the evaluator functions as the lead learner who works to facilitate the reflection of the skilled teacher on how to solve the issue at hand. The collaborative model stresses lead learner behavior; as the administrator works as a partner with the teacher to work to collaborate for a plan of action. The directive-informational model enables the teacher to provide limited input for determining the course of action (elements of formative evaluation). In the directive control model, the administrator serves as the manager dictating the necessary steps to be taken to with no input from the teacher (summative evaluation). Just as many teachers need some retooling for the type of instruction taking place in today's classroom, the administrators across our nation also need further coursework in curriculum supervision as they move away from mere managers to lead learners of a professional learning community (Brooks, et al., 2007).

Lead learner. Perhaps, the most influential relationship of a teacher is the administrator who can engage not only as an evaluator, but also as the coach and lead learner equipped with the knowledge and skill set to be the instructional leader to guide all teachers in transitioning into the facilitators of student learning that will be necessary to compete as creative thinkers in the 21st century global market. The building level administrator must decide what is needed for change, as he/she is the one who is connected and has the most daily interaction with teachers, students, parents, community, and other groups of stakeholders. Therefore, attention to adult learning theories and the role of building trust between the evaluator and teacher will be crucial

as both parties work together. This is especially true in formative evaluation to ensure that the classroom practices taking place are preparing our youth for the future. In the era of accountability, effective instructional leadership that ensures academic achievement for all students entails that expectations be clear, instruction be monitored using walk-through observations, and professional development opportunities be tailored to meet each teacher's individual needs (Ovando & Ramirez, 2007).

As the literature has indicated an increase in the focus on school leadership, further examination is also needed on the effects that instructional leadership practices have on student achievement (Leithwood & Riehl, 2003). An administrator no longer can simply manage the logistics of the school, but must also become the lead learner; therefore, the institution needs to move student academic achievement forward. No matter what leadership style is adopted, the critical point is that it is the leader will be ultimately responsible for forging the vision, building capacity, and ensuring that the necessary steps are instituted. Instructional leadership not only entails monitoring and evaluation, but one must also create and establish the faculty as a Professional Learning Community in a vision of teaching and learning that utilizes data while fostering the belief that all members must work together to analyze the walk-through data in order to move forward in addressing student academic achievement (Stronge, Richard, & Catano, 2008).

Blasé and Blasé (2000) revealed that the two key elements for impacting student achievement are for principals to talk with teachers to promote reflection and for building principals to promote growth opportunities for professional development. As a lead learner one must realize that it is impossible to work one-on-one in a concentrated manner with each teacher to push student academic achievement forward. Therefore, when working with individual

teachers one must create the circumstances for professional collaboration and pose questions to allow for individual reflection and growth. It is necessary to use the data provided from walk-throughs conducted with EETT to enable principals to set the stage for teachers to collaboratively work on problems with the intent of moving the school forward (Cervone & Martinez-Miller, 2007; David, 2007; Granada & Vriesenga, 2008; Kachur, et al., 2009; Skretta, 2008). When data are compiled efficiently and shared with teachers in an effective manner, professional conversations will take place (Skretta, 2008). Research has shown that, when a principal creates the circumstances for collaboration among the faculty, there is an increase in student academic achievement (Cotton, 2003). It is obvious that empowering groups and creating an ongoing process for individuals to come together and take on the responsibility for improving the academic achievement leads to ownership of the implementation and outcomes. By empowering the faculty, a principal takes on the role of shared leadership to create the circumstances by which an organization and individuals will be successful in improving instructional practices, engaging in continuous learning, modeling expected behavior, aligning work with individual's strengths, and allocating resources to advance these improvements (Elmore, 2004).

In the era of school accountability, it is clear that the critical role of an administrator must center on improving student achievement for each and every student. In a meta-analysis, Marzano et al. (2001) revealed the interacting impact of the district, school, and teacher of the following strategies is 31 percentile points in student achievement when curriculum is focused on improvement in student academic achievement: (a) well-articulated, (b) aligned to assessments, and (c) school leaders monitor the measurable impact, or effect size the extent to which it is actually covered. Therefore, as a principal, the number one priority should be to

invest his/her time in aligning the school systematically to improve and ensure each student is experiencing the best educational experience in every classroom (Youngs & King, 2002). In order to ensure that proper implementation of best practices occurs in the classroom, there is a heightened urgency for energy and time to be devoted to teacher supervision and evaluation that is connected with improving student achievement (Marshall, 2005; Ovando, 2001). Effective instructional leadership that ensures academic achievement for all students entails that the expectations must be clear, instruction is monitored using walk-through observations, and professional development opportunities are tailored to meet each teacher's individual needs (Ovando & Ramirez, 2007).

Professional development & learning communities. Professional development is best served when it is intentional, ongoing and systematic, and these principles are manifested in effective Professional Learning Communities (PLC) (DuFour & Eaker, 1998; Guskey, 2000). Guskey (2000) further defined the principles of effective professional development as: (1) a clear focus on learning and learners; (2) an emphasis on individual and organizational change; (3) small changes guided by a grand vision; and (4) on-going professional development that is procedurally embedded. DuFour and Eaker (1998) defined the characteristics of Professional Learning Communities as having: (1) shared mission, vision, and values; (2) collective inquiry; (3) collaborative teams; (4) activity orientation and experimentation; (5) continuous improvement; and (6) results orientation. If the embedded professional development is based upon teaching and learning needs then data must be gathered to allow for the PLCs to systematically improve teaching and, in turn, raise student achievement (Shannon & Bylsma, 2004). Therefore, the leading learner must understand which data are to be collected and

arranged in a meaningful way as to allow interpretation and conclusions to be made for influencing appropriate decision making (Bernhardt, 1998).

Individual and group data collected from walk-throughs may be reviewed by individuals and groups to identify strengths and areas for focused attention. It is the principal's responsibility to support teachers individually as well as to create the circumstances for collaboration in order to improve the skill set and knowledge necessary to improve student achievement (Elmore, 2000). Leaders, in school districts that are showing student academic improvement, utilize classroom walk-throughs to monitor the day-to-day work of teachers, implementation of curriculum, and professional development initiatives (Shannon & Bylsma, 2004; Walberg, 2007; Zavadsky, 2006). As districts have leaders focusing attention on monitoring and collecting the walk-through data, it will be necessary train the individuals and provide a mechanism to those observers in order to systematically gather and analyze the data for continuous improvement (Bernhardt, 1998; Lezotte & McKee, 2002). Walberg (2007) urged that the data gathered to be focused on student learning, kept user-friendly, be available in a timely fashion, and that staff members receive training on how to work with the data to "analyze it, discuss it, and use it on a routine basis to adjust instruction to better meet students' needs (p. 36). Herein will be the power to create ownership for the faculty; by turning over classroom walk-through data to be analyzed in small groups and, in turn, taking the initiative to assess strengths and discuss how collaborative efforts may be used to improve student learning.

In order to provide effective feedback and engage the faculty, there must be a concerted effort placed on the training of the evaluator, with an emphasis on active learning and in-situ training that goes beyond mere passive instruction (Heneman & Milanowski, 2004; Milanowski & Heneman, 2001). For example, Iowa has implemented the Iowa Educator Approval Training

Program as a state initiative in order to provide clarity and consistency and ensure that all Iowa teachers have a competent and trained evaluator who makes decisions about personnel as well as professional development opportunities (Iowa DOE). Like teachers, administrators need further coursework in curriculum supervision as they move away from mere managers to lead learners of a professional learning community (Brooks, et al., 2007).

It is critical to note that, often in education, the pendulum is swung from one side to the other without taking into account the need to maintain perspective and balance. In this case, school administrators must understand that management and leadership are intertwined and cannot be separated (Witziers, et al., 2003). Active involvement in conducting walk-throughs ensures visibility and the ability to maintain order while allowing the opportunity for instructional leadership to be manifested in daily interactions. Marzano (2003) revealed that at the cornerstone of school reform is the leadership that ensures sustaining a school improvement initiative by imbedding the work into the organizational structure. The point of merging managerial roles with instructional leadership responsibilities ensures that the manager in the principal not only can institute the initiative, but it will also take a lead learner to ensure proper implementation that becomes embedded into the practices of the school culture.

Student academic achievement. In order to make significant gains in student academic achievement, it will be necessary for principals to take on the added instructional leadership responsibilities to ensure the work is done to make adequate improvement (Elmore, 2000). Yet, the most obvious role for a principal is the indirect influence and instructional leadership provided by focusing walk-through data collection on those indicators of curriculum and instructional practices tied to the school's academic achievement goals in order to focus the learning community (Stronge, et al., 2008). Two recent dissertation research studies provided

qualitative research evidence that principals who conduct classroom walk-throughs have a positive impact on instructional practices and student achievement (Keruskin, 2005; Rossi, 2007).

Electronic evaluation technologies and tools (EETTs) provide a framework and possibilities for merging student information system (SIS) with evaluation data to determine the impact of teacher performance on student achievement. An in-depth analysis, connecting walk-through data with standardized test results, could be conducted annually as well as further connections throughout the year with student progress reports. In order to make significant gains in student academic achievement, principals must improve teaching and learning by focusing on changing instructional practices by monitoring and evaluating (VonVillas, 2004). Now armed with data, the administrator and teacher(s) may collaborate to indicate the areas of need in order to grow and continue to advance student academic achievement (Cervone & Martinez-Miller, 2007; Kachur, et al., 2009).

Balanced leadership. In order for a principal to impact student academic achievement, the emphasis of the instructional leader must be on improving the actual practices of teaching and learning within the classroom (Kachur, et al., 2009). In a MCREL meta-analysis of school administrator leadership, the strength of the relationship between 21 specific leadership responsibilities and associated behaviors were assessed to judge the quantitative effect on student achievement (Marzano, et al., 2005). Specifically, nine Balanced Leadership responsibilities are associated with the practice of conducting classroom walk-throughs: relationships, intellectual stimulation, involvement in curriculum, instruction, and assessment, monitor/evaluate, ideals and beliefs, optimizer, input, and flexibility (see Table 2) (Pitler & Goodwin, 2008). As an

administrator commits to the walk-through process as a means to impact classroom instruction, the circumstances will allow the principal to indirectly bolster student achievement.

There is also an obvious increase in the frequency and quality of perception regarding the responsibility of visibility (Marzano, et al., 2005; Pitler & Goodwin, 2008). Visibility, which, regardless of the walk-through model one invokes, is linked to instructional leadership practices. Visibility is defined as an increased incidence of time in classrooms enabling administrators to actively work assisting teachers and assessing their needs of professional development. In turn, by committing to the walk-through process as the means to indirectly impact classroom instruction, the principal will create the circumstances to assist

Table 2. Walk-throughs: Ten balanced leadership responsibilities and their correlations (*r*) with student academic achievement

Responsibility	The Extent to Which the Principal…	Average Correlation (r)
Relationships	Demonstrates an awareness of the personal aspects of teachers and staff	.18
Intellectual Stimulation	Ensures faculty and staff are aware of the most current theories and practices and makes the discussion of these a regular aspect of the school's culture	.24
Involvement in Curriculum, Instruction, and Assessment	Is directly involved in the design and implementation of curriculum, instruction, and assessment practices	.20
Monitoring/Evaluating	Monitors the effectiveness of school practices and their impact on student learning	.27
Ideals/Beliefs	Communicates and operates from strong ideals and beliefs about schooling	.22
Optimizer	Inspires and leads new and challenging initiatives	.20
Input	Involves teachers in the design and implementation of important decisions and policies	.25
Flexibility	Adapts his or her leadership behavior to the needs of the current situation and is comfortable with dissent	.28
Contingent Rewards	Recognizes and rewards individual accomplishments	.24
Visibility	Has quality contact and interactions with teachers and students	.20

(Adapted from Marzano et al., 2005, pp. 42 – 43.)

in bolstering student achievement (Pitler & Goodwin, 2008). Hence, the practice of frequent classroom walk-throughs highlights the importance of teaching and learning (Schmoker, 2001).

Classroom walk-throughs and personnel evaluations

Effective training for administrators in utilizing electronic evaluation technologies and tools (EETT), in conjunction with district developed templates that are linked to state teaching standards, enables consistency among evaluators and enhances the ability to systematically collect and analyze the data (Granada & Vriesenga, 2008; Kachur, et al., 2009; Mujis, 2006). With the summative report options of the electronic reports an administrator may not only conduct walk-throughs, but also utilize the technology for implementation studies and compare individuals to the department, and across department analysis, or even across district ("Austin Sky," 2008; Media-x, 2008). Herein lies the significance of embracing electronic evaluation technology—it is the ability to quickly collect and analyze a tremendous amount of observational data allowing for a district, school, department, and individual teacher to objectively take a critical look at data to influence practice and needed professional development.

As part of the response to the accountability mandates, administrators across the country are working on practices that are increasing the frequency of both informal and formal observations (Kachur, et al., 2009). Some administrators are working to shift some of the burden away from the pressure placed on both the teacher and evaluator for the formidable event of reviewing a summative portfolio. Rather, there is a concerted effort to place an emphasis upon observation and constructive feedback that goes along with engaging in collaborative dialogue (Downey, et al., 2004; Johnston, 2003; Using the classroom walk-through as an instructional leadership strategy," 2007, February). A systematic method is necessary to ensure that our

teachers are effectively reaching all students in the classroom, and that they are implementing innovative initiatives designed to address the needs of the up and coming creative classes that will serve as the basis for future jobs. The data gathered from classroom walk-throughs may serve as the catalyst to spur administrators to engage in collegial dialogue with teachers (Granada & Vriesenga, 2008; Skretta, 2007; Using the classroom walk-through as an instructional leadership strategy," 2007, February).

The impact of merging evaluation technology into the teacher evaluation system during walk-throughs is still untapped as presently the utilization of formative evaluation remains primarily in theory and not in practice. The economic impact for the public's investment in education would be best served by useing the teacher evaluation system for a greater impact on professional development (formative) and personnel decisions (summative) (Mathers, et al., 2008).

Through the utilization of electronic evaluation technologies and tools in the teacher evaluation, administrators will be using tools that objectify the process of data collection, along with the subjective elements that are necessary to include ensuring not only that the science of teaching occurring (best practices of research-based techniques), but the spirit and art of education is being addressed (VonVillas, 2004). This will take re-educating administrators, teachers, school boards, and the public about the expectations of what is to occur in the learning process and building a clear feeling of trust to ensure that a good-faith effort is given to support the classroom teacher along the process.

Merging EETT and walk-throughs for professional development and the role of professional learning communities

Utilizing technology in the walk-through process must not simply allow for school leaders to engage in one of the walk-through models that go by an alphabet soup acronym; instead, one must become engaged as an instructional leader (Brooks, et al., 2007). In order to improve academic achievement, it is imperative not to merely rely on the instrument and data that are collected and analyzed. It is the professional conversations generated from review with teachers that will impact teaching practices and the student learning process (Heneman & Milanowski, 2004). If only the "managerial tasks" were delegated to the principal, he/she would simply remain a supervisor and not a leader. Therefore, the administrator should serve both capacities of the teacher evaluation system: for personnel accountability (summative) and professional growth (formative) (Milanowski, 2005; Stronge, 2006). Furthermore, it is vital to not only equip current administrators with the tools necessary to become the needed instructional leaders, but as Ovando (2005) indicated, the structure of administrative preparation programs must be examined.

In order to equip teachers with the necessary skills to teach future generations in the 21st century, it is necessary to train the administrators to be lead learners focused on instructional leadership that will impact student achievement for each and every child across every classroom in the United States of America (Wagner, et al., 2006). It is not only a moral imperative that administrators ensure that this is taking place, but the nation also is beginning to live in the reality of the economic hardships that will occur if it is not producing the creative class for the global economy (Wagner, 2008). Most of the nation's teachers, both young and old, have become very good at doing what was expected of them to teach in the realities of 1960s.

However, as a whole, neither teachers nor administrators have made the leap into implementing a rigorous and relevant curriculum that is engaging the hearts and minds of the nation's youth.

It is paramount that principals take a far more active role as leading learners within professional learning communities (DuFour & Marzano, 2009). Without administrators taking a more active role in educational improvement efforts, the retention and recruitment of new, qualified teachers will be increasingly difficult (Ingersoll, 2003a). The skills necessary for school leaders to work on effective professional development of teachers creates the demand for school administrators to become lead learners who will aid in the process of teacher professionalization (Ellett & Teddlie, 2003). Therefore, it is now expected that administrators lead collaborative efforts for professional development and learner-centered education to occur in every classroom. This requires on-going evaluation to ensure that these practices are occurring in the classrooms and that the teachers posses the skills necessary to implement the initiatives. One way of achieving this is by utilizing technology to highlight areas of concern and needs to be addressed early on, as well as engaging in formative evaluation conversations and a collaborative culture is fostered (Downey, et al., 2004; Granada & Vriesenga, 2008; Kachur, et al., 2009).

Given the increased pressures to improve standardized test scores and meet AYP under NCLB legislation, it should be seen as essential for administrators to conduct walk-throughs while utilizing electronic evaluation technologies and tools (EETT). This walk-through behavior, data collection, and frame of mind must become systemic, intentional, and purposeful in order to: (a) ensure proper implementation of initiatives; and (b) give the appropriate importance to ensure one leads the learning and professional development needs necessary for faculty to come together to move the district forward (Cervone & Martinez-Miller, 2007; Granada & Vriesenga, 2008; Kachur, et al., 2009).

The role and emphasis of attributes sought in an administrator have changed over the past few decades; roles have shifted away from the managerial characteristics to the attributes of instructional leadership. Utilizing electronic evaluation technologies and tools (EETT) in the walk-through process must not merely allow for school leaders to simply become managers with technology in their hands; rather, a principal must become engaged as the lead learner. Administrators need to conduct frequent formal and informal observations in the course of effective walk-through procedures. In the era of accountability, effective instructional leadership that ensures academic achievement for all students entails that expectations be clear, instruction be monitored using walk-through observations, and that professional development opportunities be tailored to meet each teacher's individual needs (Cervone & Martinez-Miller, 2007; Downey, et al., 2004; Johnston, 2001; Ovando & Ramirez, 2007). The professional dialogue emerging from the classroom walk-through data that will frame the feedback and promote sharing must focus and reflect on instructional practices and set the stage for the next steps for the professional learning community. Continuous monitoring of data by the professional learning community will enable principals to reflect on how to support the faculty and individuals of the PLC as well as how to make adjustments to implement instructional initiatives (DuFour, DuFour, Eaker, & Karhanek, 2004; Using the classroom walk-through as an instructional leadership strategy," 2007, February).

Formative evaluation and data collection must be systematic as well as be organized effectively where it links to relevant research. This will lay the framework for conversations that examine professional development needs and areas of strength; building on these conversations will impact growth in student achievement. Attention to adult learning theories and the role of building trust between the evaluator and teacher will be crucial (Downey, et al., 2004). The level

of trust between adults can be equated to the number of positive interactions divided by the number of overall interactions (Wagner, 2008). Thus, the practice of conducting classroom walk-throughs may serve as a method for increasing visibility, interaction, and constructive professional exchanges. Administrators will need further professional development in curriculum supervision as they move away from mere managers to lead learners of a professional learning community.

The effective administrator will be one who can engage not only as an evaluator, but as the coach and lead learner equipped with the knowledge and skill set to be the instructional leader necessary to transition student learning into the 21st Century. Through the utilization of electronic technology in the teacher evaluation process, the administrators will be using a tool that objectifies the process of data collection. The follow-up conversations ensure not only that the scientific elements of teaching are present, but the spirit and art of education is also being honored in the reflective questions posed. In focusing in on formative evaluation and data, the evaluation process will not be seen as merely a hoop-jumping process. Instead, the teachers will examine the connections to professional development and personnel decisions and see not only a sense of accountability, but a larger purpose (Mathers, et al., 2008).

As the adage states, “What gets measured, gets done.” (Peters & Waterman, 1982). Therefore, evaluators must set clear expectations (summative), goals (formative), and purpose (lead learner) to ensure that walk-throughs measure and focus on meaningful conversations concerning the realities of the practice in the classrooms. In order to foster a collegial environment, classroom walk-throughs pull in teachers as partners to build ownership and capacity to come together in order to address student academic achievement as a professional learning community (Bushman, 2006; Keruskin, 2005). Bushman (2006) illustrated how

involving teachers as classroom walk-through partners can be a powerful step toward creating a collective professional community centered on improving instructional practices while breaking down power barriers and fostering a spirit of collective efficacy. Classroom walk-throughs are most effective in raising student academic achievement when they are rooted in the foundational elements of a strong professional learning community (Bushman, 2006; Downey, et al., 2004; DuFour, et al., 2004; Using the classroom walk-through as an instructional leadership strategy," 2007, February). Administrators must analyze trends in their school to inform the necessary professional development opportunities, as well as provide opportunities for personnel to collaborate and work together to improve academic opportunities for the students of the school. Now armed with data, the administrator and teacher may collaborate to indicate the areas of need for teaching, learning, and assessment in order to grow and continue to advance student academic achievement for all (Cervone & Martinez-Miller, 2007; Kachur, et al., 2009).

Summary

The review of relevant literature and previous research conducted supports the need for further examination of evaluation. Previous studies illustrated that the supervisory practices of the principal indirectly impact the instruction and the learning process for positive gains in student academic achievement. In practice there is a great variance regarding the intent and function of conducting walk-throughs as well as the perceived role of the building level administrator to impact student academic achievement. A lack of research surrounding the use of eWalk (EETT) while conducting classroom walk-throughs indicates a need to study the practices and perceptions of administrators.

The next chapter will describe the design and methodology applied to the descriptive and inferential statistics of Georgia, Iowa, and Kentucky principals' practices in conducting classroom

walk-throughs with the use of an eWalk and the relationship between the self-reported perception for the walk-throughs by those administrators.

CHAPTER 3. METHODOLOGY

This chapter describes the quantitative research methods used in gathering the descriptive and inferential statistics of administrative practices and their perceptions through web-based survey research. The overarching research question centers on the impact on an evaluator's perception and behavior regarding the purpose and intent of conducting classroom walk-throughs in conjunction with the use of eWalk. Specifically, this chapter discusses the design, population and sample, instrumentation, variables, data collection, and data analysis procedures for this study.

Research Design

This study employed quantitative research methods to gather data for descriptive research and inferential statistics. Quantitative research methods were selected for this study because the researcher felt that gaining an understanding of the practices associated with principals' use of classroom walk-throughs in conjunction with eWalk could best be measured through survey research under the epistemology of objectivism. Objectivism holds that viewing the existence of behavior and perceptions is meaningful regardless of conscious awareness (Creswell, 2009; Crotty, 1998). A post-positivism approach was embraced by the researcher as the theoretical model because it holds that the scientific theory and hypothesis can be empirically proven wrong through data collection. Therefore, the research methodology of using survey research is non-invasive and is an appropriate selection for exploring relationships between the behavior and perceptions associated with a large group of practitioners.

A questionnaire was developed for principals to self-report on their practices and perceptions to determine the impact of using eWalk during the walk-through process. To

determine whether or not to reject the null hypothesis, appropriate sampling methods and statistical analysis methods were used to conduct the data analysis (ANOVA). Through this quantitative research approach, it was possible to determine the relationship between an evaluator's utilization of eWalk (EETT) and the self-reported perceptions of administrator's use for formative evaluation purposes, the administrator's perception of self as the lead learner of the school, and the frequency of associated practices linked to the Balance Leadership framework.

This study surveyed the relationships that school administrators perceive between their use of eWalk and their implementation of classroom walk-throughs. The intent of the study was to: (a) gather general demographic information; (b) answer general questions regarding information on demographics and frequency of classroom walk-through behavior; (c) descriptive research regarding the perception of the purpose of the function and intent of the administrator as he/she conducts classroom walk-throughs; (d) reveal perceptions of their behavior to function as the lead learner, conducting joint classroom walk-throughs, sharing of the walk-through data results; and (e) explore the associated practices tied to the framework of Balanced Leadership and those behaviors linked to conducting walk-throughs (see Table 3). Survey research used questionnaires to extract, "…trends, attitudes, or opinions of a population by studying a sample of that population. From the sample results, the researcher generalizes or makes claims about the population." (Creswell, 2009, p. 145). The intention of this survey method was to determine if the relationship between the respondents' indications of utilization and self-reported perceptions were correlated with the purpose of walk-throughs. Both the dependent and independent variables were derived from the survey's self-reported answers. The independent variable is the level of use an evaluator has with eWalk as determined by a) the frequency (number of self-reported times per week) of walk-throughs while using eWalk and b) the level of years of

experience using eWalk. The dependent variables were the mean of the evaluator's responses to questions indicating self-reported perception and behavior related to the purpose and intent of walk-throughs for formative rather than summative evaluation purposes, the change in perceptions of functioning in lead learner roles, as well as the mean responses regarding changes in associated practices linked to the Balanced Leadership framework.

Population and Sample

This examination of the evaluators' uses of classroom walk-throughs for informal teacher observations sought to develop descriptive research and inferential research on the impact of eWalk (an electronic evaluation technology and tool). The target population of the administrators surveyed was PK-12 school administrators who are responsible for conducting evaluations and utilize electronic evaluation technologies and tools during classroom walk-throughs. The sample of the administrators surveyed was limited to international building-level PK-12 school administrators who utilize eWalk during classroom walk-throughs. A complete list of eWalk building level principals cannot be generated through databases available through the Media-X's Systems database. A private directory of school administrators is maintained in Media-X's database did indicate that approximately 8,000 K-12 administrators were registered as of May 10, 2010 to use the eWalk software program in the states of Georgia, Iowa, and Kentucky (Media-X, 2010). This information was reported by Steve Moretti, the CEO/President of Media-X Systems. It will be necessary to work with the Media-X Systems in order to assure that the survey will be disseminated to a cross-representative sample of current building administrators who are using eWalk software product. The sample excluded those in administrative positions who are not primarily responsible for evaluating teachers (e.g., deans, attendance facilitators, School Administrative Managers (SAMs), and central office personnel) as their frequency of

walk-throughs and usage of eWalk would not be representative of administrators charged with improvement of teacher instruction and student achievement. The sample will be limited to only those evaluators who utilize eWalk as this is an initial study of school administrator's use of Electronic Evaluation Technologies and Tools. There were no restrictions regarding the tenure of the principals; the intent of the study was to examine current practices among all building level administrators, regardless of experience.

Web-Based Survey

The survey developed for this research was sent electronically via the internet through a "web-based survey." Dillman's (2000) foundational survey research outlined the benefits and possible limitations of using web-based survey to conduct research. The benefits of a web-based survey included efficiency for quick turnaround, higher response rates, lower cost, elimination of geographic boundaries, and increased honesty (D. Dillman, 2007). It was anticipated that there would be increased turnaround as subjects did not have to: 1) wait for conventional mail delivery, 2) fill-out the survey, and 3) put forth effort to return the survey via postal services. An electronic survey enabled participants to receive the invitation to participate via e-mail. This format could have increased the response rate as subjects had an immediate e-mail reminder in their work place inbox.

The web-based survey tool used for this study was the Qualtrics survey software package. Qualtrics allowed for the researcher to conduct traditional surveys through the internet where subjects were sent an invitation to participate in a study by filling-out the questionnaire. Qualtrics (2010) has many tools built-into the system that has allowed for creation of an invitation and reminder messages through the use of templates (see Appendix C and D). Once the survey was completed, the results were immediately submitted and accessible to the

researcher for analysis. Since it was an electronic survey, there was no initial cost to use the Qualtrics survey; the service is free for graduate students in the Department of Educational Leadership and Policy Studies at Iowa State University. Since the internet transmits messages around the globe within seconds, a web-based survey may have eliminated the concerns with geographic distance. It was the researcher's anticipation that a participant would take an average of 15 minutes to complete the survey. The design, construction, and sequencing of instructions and the questions posed were designed to enable the participant to easily understand the question and to respond appropriately. The survey was conducted via the web, with safeguards designed to protect the respondents identity; this allowed for greater anonymity and, therefore, there was a greater likelihood of honest responses (D. Dillman, 2007).

Historically, surveys utilizing web-based tools have been criticized as inherently biased because of disparate access to the internet based upon socio-economic status and other factors (D. Dillman, 2000). Skeretta (2008) illustrated that inadequate sampling through a web-based survey is not a legitimate limitation for research conducted with public administrators as the whole population has access to computers and the internet through their profession. Maintained by Media-X Systems, the database does not designate the administrative role of the registered evaluator; therefore, as part of the survey's demographic information, respondents indicated their administrative assignment in order to narrow the selection to only those who were in building-level positions. Therefore, dissagregating the responses from the database for the survey took special effort prior to conducting the final data analysis. It is inherent in the present responsibilities and skill-set for administrators to have the ability to use minimal technology to access and complete an internet survey. Likewise, K-12 school administrators using the eWalk software program should not have an issue with a web-based survey as all district administrators

are required to access e-mail as part of their job and responsibilities. Dillman (2007) reiterated this point in his research, that lack of coverage should not be a problem when the population surveyed uses electronic mail or the internet. Furthermore, development of web-based surveys has moved from a "novel idea to routine use" among survey research especially for "populations with nearly complete web access" (Dillman, 2007 p.145).

Pilot Study Procedures

During a graduate course the researcher completed a capstone project wherein a panel reviewed and provided constructive criticism for content and format modifications. For the current study, a web-based Qualtrics survey replaced the paper-and-pencil survey utilized in the previously conducted pilot study (Qualtrics, 2010). The Qualtrics survey software allowed for the survey data to be downloaded into Microsoft Excel and the Statistic Package for Social Sciences (SPSS). As a result of completing the pilot study, the survey was drastically changed to reduce the number of stem questions regarding formative and summative evaluation. Additionally, the stem questions were reworded and placed on a continuum with correspondence from summative to formative functioning regarding the practice of conducting classroom walk-throughs. The decision to eliminate non-building level principals from the final data analysis was also a result of the skewing of the data due to the inadequate amount of data indicated by the infrequency of conducting classroom walk-throughs. Two dissertation committee members had reviewed and provided input prior to the piloting of the survey to practicing administrators. Furthermore, the survey was administered to two practicing building administrators who currently conduct classroom walk-throughs with the use of eWalk. Throughout this pilot procedure, the administrators used a paper-and-pencil version of the questionnaire; they read aloud, completed, and shared their thought processes and provided feedback about the design

and construction of the questions. The administrators were asked to provide input about the flow of the instrument and the ease of understanding the constructed questions. As a result, several survey items underwent word choice changes to assist the administrator's understanding of the survey. The final copy of the survey instrument was submitted to the researcher's dissertation committee for evaluation and modifications.

Instrumentation

The question framing the study was to examine the impact that using eWalk (an electronic evaluation technology and tool), in conjunction with classroom walk-throughs, has upon an evaluator's perception and behavior regarding the purpose and intent of the walk-through process. The researcher used Qualtrics to create a web-based survey. Skewing of the data by multiple submissions is not possible since the interface of the software does not allow for respondents to resubmit after they have completed the survey (Qualtrics, 2010). Because the identification of subjects was by their e-mail addresses, Qualtrics allowed for follow-up reminders to be sent periodically to ensure maximum respondents. The design of the self-administered survey (see Appendix B) enabled the participant to take approximately 15 minutes to complete, which is consistent with the considered recommendations allowing for a concise collection of data with a minimal time commitment (Dillman, 2000).

The concise design of the survey allowed for quick completion of the questionnaire. The design, the construction, and the sequencing of instructions enabled the participants to understand the questions and to respond appropriately. The self-reported survey was on the use of eWalk (an electronic evaluation technology and tool), its impact, and the evaluator's perception and behavior regarding the purpose and intent of the walk-through process. The majority of the questions posed in the survey were: single choice presence/absence categorical,

either yes/no responses, or choose the one best response. There were also multiple choice presence/absence categorical (choose all responses that apply), open-ended/fill number, and ordinal responses enabled the administrators to self-report their perception regarding walk-through practices on a five-point Likert scale. The five-point Likert scale was used; a four-point Likert scale was used during the capstone research and the initial pilot procedures. The reason for changing the self-administered questionnaire to utilize a five-point Likert scale was to avoid the common effect where respondents tended to cluster their answers (D. Dillman, 2007). The five-point Likert scale allows for the measurement of a closed-ended question on an interval level rating for respondents. In turn, descriptive statistics may use the interval scale ratings to report on measures of central tendency such as the mean, median, mode, standard deviation, and frequency distributions. The mean is the arithmetic average of scores; the median is the score that falls in the middle of the distribution; the mode is the most frequent score in the distribution; and the standard deviation is the average deviation between individual scores and the mean of the distribution (Urdan, 2005). The frequency distribution provides actual raw data numbers of how respondents self-reported their perspectives on the forced-choice questions from the survey.

The survey was constructed following an extensive review of the literature on evaluator walk-throughs. The survey created utilizes 79 questions with varying shorter versions due to possible skip patterns based upon the respondent's selections. The full version of the survey is provided in Appendix B. The survey was separated into six sections for administration to participants.

The first section focused on professional development using eWalk and other general questions regarding experiences with conducting walk-throughs. This section contained questions regarding the responder's level of use of eWalk as determined by the length of years

and the frequency regarding the extent of the of self-reported classroom walk-throughs completed. Additionally, other questions focused upon the of experience and background with formal training in conducting classroom walk-throughs and eWalk as well as how the use of eWalk has impacted their practices regarding conducting classroom walk-throughs.

The second section was comprised of 20 questions that were developed to determine how conducting walk-throughs with eWalk impacts an evaluator's perception of the function and purposes for conducting walk-throughs for formative and summative evaluation. Furthermore, the survey questions were designed to determine the extent that use of eWalk impacts the participants' perceptions of their behavior to function as the lead learner of their school. The questions in the second section allowed administrators to self-report their perception regarding walk-through practices, based on a five-point Likert Scale ranging from Strongly Disagree to Strongly Agree. Many of the questions in the second section were adapted from the work by Downey et al. (2004) regarding the differences between summative and formative evaluation as well as the role of an evaluator serving as the lead learner.

The third and fourth sections were comprised of questions regarding whether the participant had conducted joint walk-throughs and the circumstances surrounding the sharing of the classroom walk-through data results. Many of the questions in the third and fourth sections were adapted from the work of Kachur et al. (2010) regarding the role of an evaluator to serve as the lead learner of a Professional Learning Community. The fifth section contained 16 questions derived from MCREL's associated practices tied to the framework of Balanced Leadership and those behaviors linked to conducting walk-throughs. The 10 Balanced Leadership responsibilities associated with the practice of conducting classroom walk-throughs are: visibility, relationships, intellectual stimulation, involvement in curriculum, instruction, and

assessment, monitor/evaluate, ideals and beliefs, optimizer, input, and flexibility (Pitler & Goodwin, 2008). The researcher utilized MCREL's study to develop survey questions that were designed to measure an administrator's self-reported perception regarding the extent of the associated practices with the 10 Balanced Leadership responsibilities linked to conducting classroom walk-throughs. Thirty-seven of the original items from MCREL's questionnaire were used as part of this survey instrument (see Appendix B). A Cronbach's Alpha had been conducted on the entire instrument with all 21 Balanced Leadership responsibilities and 92 associated practices to ensure there was internal consistency and validity. The results yielded a Cronbach's Coefficient Alpha score of 0.92 ensuring that there would not be a need to remove any questions from the survey (Marzano, et al., 2005). The extent to which the administrator agreed with the statements were self-reported responses from a four-point Lickert-scale ranging from "This does not characterize me or my school" to "This characterizes me or my school to a great extent." Additional research has illustrated how MCREL's research may be used to develop survey questions that were designed to measure an administrators self-reported perception regarding the extent of the associated practices with the 10 Balanced Leadership responsibilities were replicated from previous studies where the instrument had been tested for validity and reliability (Daniel, Kyle, & Ulrich, 2005; Hopper, 2009). A Cronbach's Alpha had been conducted on the entire instrument with all 21 Balanced Leadership responsibilities and 62 associated practices to ensure there was internal consistency and validity. The results yielded a Cronbach score of 0.983 with a corresponding alpha score of 0.983 ensuring that there would not be a need to remove any questions from the survey (Daniel, et al., 2005; Hopper, 2009). The extent to which the administrator agreed with the statements were self-reported responses from a six-point Likert-scale ranging from not descriptive of practice to highly descriptive of practice.

The last section contained general questions that gathered demographic information about the participant. These descriptive questions included the building level, years as an administrator, years in the present position, and statistics related to the school setting. In this study, the questions were limited in order to preserve a degree of anonymity.

Sources of Error

In survey research there were four possible sources for error: sampling, coverage, measurement, and nonresponse (D. Dillman, 2007). Sampling error occurred where only part of the population was selected to be surveyed. Coverage error is an error between the target population and the sampling frame, where not all members have the opportunity to participate in the survey. In this research, as the entire sample of eWalk users were provided the opportunity to participate in the survey, sampling error must be of concern related to other forms of EETT. To determine if the results were to be generalized to administrators using other forms of electronic evaluation technologies and tools, researchers would need to consider the relationship between the purpose and functions of eWalk and how this matched other forms of EETT. Measurement error occurred when the framing of the questions or lack of clarity may have inaccurately biased the responses. Non-response error is an error of analysis generated from the responders' statistical values being significantly different than the entire population. The researcher attempted to control this by receiving responses from the majority of the population sampled. By utilizing the Qualtrics online survey software, the researcher was able to use the invitation and follow-up functions available with web-based surveys in order to reduce the error (Kane, 2007).

Data Collection

In order to receive a high response rate, consideration to four elements were utilized in designing the survey and associated methodology: 1) developing a respondent-friendly questionnaire, 2) planning on initiating three contacts, 3) allowing for ease of electronic submission, and 4) personalizing the correspondence were (D. Dillman, 2007). The fifth element for achieving a high response rate was not present; the volunteers were not compensated for participating in the electronic evaluation technologies and tool survey regarding practices associated with using eWalk in conjunction with classroom walk-throughs. A Qualtrics template based upon Dillman's (2000) work was used to send invitations and friendly follow-up reminders via e-mail. The communication included material similar to a letter of consent: purpose of the project, importance of collecting the data, proposed timeline, expectations of time and energy, and instructions as how to access and participate in the on-line survey (see Appendix C) (Kane, 2007). Three follow-up reminders were sent out at the end of the first week, one week later, and two weeks after the original invitation was extended (see Appendix D). As participants completed the web-based survey, their data was entered and compiled into the database until the survey participation was closed.

The growth in prominence of the eWalk software program and other forms of electronic evaluation technologies and tools can be characterized by how several states and large districts are moving toward purchasing a license for each administrator. Although the survey was intended to access the practices of all the international users of eWalk, to represent the scale of implementation several state and providence departments of education have purchased licensure for each PK-12 administrator. Iowa may serve as a functional representation of the scale of eWalk clients in one such state as indicated in the Annual Condition of Education Report (2009)

which was recently released by the state of Iowa's Department of Education. Included in the report were the descriptive statistics for Iowa's administrators during the academic year of 2008-2009. The report indicated that there are 1,158 building level principals and 319 superintendents currently serving the 362 school districts. Personal conversation on December 4, 2009 with Vic Jarvis (Bureau of Teaching and Learning Services) who is heading the state's work with eWalk, indicated that Iowa's Department of Education has purchased a license to be available for every one of the 1,520 public school administrators. However, as part of the building-level PK-12 administrators surveyed, only the 1,158 PK-12 public school principals working as building level administrators, who by the nature of job responsibilities are primarily responsible for conducting teacher evaluation, were sent invitations to participate.

The researcher hoped for a 50% response rate from the current administrators that have an eWalk account; this number of respondents was well over the needed participants to ensure a less than 3% sampling error with a 95% confidence level (D. Dillman, 2007). The survey was disaggregated into three sections with questions aligned to using walk-throughs as formative evaluation, the evaluator's function as the lead learner, and the reported practices associated with the Balanced Leadership framework. The mean for each area was then calculated to determine the degree of belief in the behavior associated with conducting classroom walk-throughs.

Research Questions and Hypotheses

The overarching research question for this study was to determine how the use of eWalk (electronic evaluation technology and tool) impacts the evaluator's perception and behavior regarding the purpose and intent of the walk-through process. In particular:

1. Who are the administrators currently using eWalk and what are their general demographic characteristics and training experiences associated with classroom walk-throughs?
2. What administrative practices and behaviors are associated with the use of eWalk and how do they impact the processes surrounding classroom walk-throughs?
3. Does the level of eWalk use have an impact upon administrative perceptions to utilize the walk-through process as intended for formative evaluation?

Null-Hypothesis: There is no statistically significant relationship between the level of eWalk use and a higher perception by the administrator to utilize the walk-through process as intended for formative evaluation.

4. Does the level of eWalk use have an impact upon administrative perceptions of themselves as the lead learner of the faculty?

Null Hypothesis: There is no statistically significant relationship of the administrators to self-report themselves as the lead learner of the faculty due to the level of eWalk use.

5. Does the level of eWalk use have an impact upon changes in administrative perceptions and behaviors connected to the associated practices of the Balanced Leadership framework?

Null Hypothesis: There is no statistically significant change in administrators' behaviors regarding the associated practices that are linked to the Balanced Leadership framework due to the level of eWalk use.

Data Analysis

The number of self-reported walk-throughs conducted with the use of eWalk and the level of experience with the use of eWalk were compared to an average of the Likert scale

answers for the three areas of formative rather than summative evaluation, functioning as lead learner, and associated practices linked to the Balanced Leadership framework (see Table 3). Qualtrics has built-in reports and data analysis tools. Additionally, Microsoft Excel 2007 spreadsheets and SPSS version 17.0 were utilized to organize and interpret the data collected. Once the survey data was imported into SPSS, it allowed for completion of descriptive and inferential statistical analysis for demographic characteristics and initial analysis of relationships between the independent and dependent variables. The descriptive statistics utilized for analysis were distribution frequencies and measures of central tendency. The independent variable is the level of experience an evaluator has using eWalk determined as by the frequency (number of self-reported times per week) that one conducts a walk-through while using eWalk and the level of years of experience using eWalk. The inferential statistical analysis used was an one-way analysis of variance (ANOVA) and the Tukey HSD post-hoc test. A p-value of $p < 0.05$ was utilized for determining statistical significance for all of the data analyses.

As this study served as initial research regarding the practices of conducting classroom walk-throughs with eWalk, an emphasis was on gathering descriptive statistics. Much of the information related to general demographic information on the administrators utilizing eWalk. Additionally, descriptive research gathered information on classroom walk-through practices regarding the use of eWalk including questions regarding professional development, training experiences, and the impact of these practices upon administrators conducting walk-throughs, The descriptive statistics utilized and reported on the measures of central tendency and distribution frequencies.

Research question 3 utilized descriptive statistics and an analysis of variance (ANOVA). A one-way analysis of variance (ANOVA) test was appropriate as there were two or more

independent variables groups that needed to be compared with the means of two or more dependent variables (Urdan, 2005). A one-way analysis of variance (ANOVA) test was used to determine whether or not the means were significant between the level of use determined by the frequency and years of experience (novice and experienced) of an administrator conducting a walk-through with the use of eWalk and the self-reported responses to the perception for the purposes of summative evaluation and formative evaluation. Another ANOVA test was used to determine whether or not the means were significant between the experience of an administrator conducting a walk-through with the use of eWalk and the self-reported responses to the perception for the purposes of summative evaluation and formative evaluation. An ANOVA test was appropriate as there were two or more groups where the means of the dependent variables needed to be compared (Urdan, 2005). In running a one-way ANOVA the likelihood of making a Type I error of rejecting the null hypothesis is reduced (Urdan, 2005). Using a summative scale allowed for the item response scores to be analyzed separately as well as summed to create a score for the group of items. A mean score for the dependent variable of the perception for the purpose of summative evaluation and formative evaluation was calculated and used in order to produce an average rating for the administrator's intent for evaluation. Conducting a Tukey HSD post-hoc test allows for the researcher to identify which groups significantly differ for one another.

Research question 4 utilized descriptive statistics and analysis of variance (ANOVA). An ANOVA test was used to determine if there was a relationship between novice and experienced users of eWalk during classroom walk-throughs with the administrators' mean responses for functioning as the lead learner. Additionally, an ANOVA was utilized to determine if there was a relationship between the frequency of conducting walk-throughs with eWalk and the purpose of

functioning as a lead learner. A third ANOVA was utilized to determine if there was a relationship between novice and experienced users of eWalk with the administrators' aggregated summative scores for functioning as the lead learner of a professional learning community that utilized the classroom walk-through data. An aggregated summative score was used as each of the four questions in this section related to different aspects of functioning as a professional learning community. An ANOVA test was appropriate as there were two or more groups where the means of the dependent variables needed to be compared (Urdan, 2005). A mean score for the dependent variable of the evaluators' perceptions of themselves as lead learners of the faculty was calculated and used in order to produce an average rating for the administrator's intent for evaluation.

As this study served as initial research regarding the practices of conducting classroom walk-throughs with eWalk, an emphasis was placed on gathering descriptive statistics. Specifically, much of the information related to conducting joint walk-throughs; and the practices related to sharing of the walk-through data results were analyzed using descriptive statistics. The descriptive statistics utilized and reported on the measures of central tendency and distribution frequencies.

Research question 5 utilized descriptive statistics and an analysis of variance (ANOVA). An ANOVA test was appropriate as there were two or more independent variables groups that needed to be compared with the means of two or more dependent variables (Urdan, 2005). A summative mean score of the evaluators' perceptions of their behavioral changes in associated practices linked to each of the Balanced Leadership responsibilities was calculated for the ten dependent variables. An ANOVA test was used to determine if there was a relationship between novice and experienced users of eWalk during classroom walk-throughs with the administrators'

mean responses for the associated practices linked to the Balanced Leadership framework. Additionally, another ANOVA test was utilized to determine if there was a relationship between the frequency of conducting walk-throughs with eWalk and the associated practices linked to the Balanced Leadership framework.

Table 3.

Data Analysis and Statistical Methods for Collected Data

A. General Demographic Information on Administrators Utilizing eWalk

Item Descriptor	Response Options	Mean	Number of Participants	Percentage of Participants
Gender (33)				
Age (34)				
Residence (35)				
Highest Educational Degree (36)				
Years as an Administrator (37)				
Years in Present Administrative Position (38)				
Public or Private School (39)				
Community Description (40)				
School Building Level (41)				
Student Enrollment(42)				
Adequate Yearly Progress (43)				

Descriptive Research of Training Experiences of Administrators Utilizing eWalk

Item Descriptor	Response Options	Mean	Number of Participants	Percentage of Participants
WT Formal Training (2)				
WT Formal Training Model (3)				
Impact of Formal Training (4)				
Professional Literature (5)				
eWalk Training (8)				
Impact of eWalk Training (9)				
Need more eWalk Training (10)				

B. General Information related to Administrator Behaviors' Associated with eWalk and Classroom Walk-throughs.

Descriptive Research of Practices Conducted by Administrators Utilizing eWalk

Item Descriptor	Response Options	Mean	Number of Participants	Percentage of Participants
Required Walk-throughs (9)				
Required eWalk (10)				
Device used to Collect Data (11)				
Record Anecdotal notes (12)				
Frequency of Total WT's (13)				
Frequency of eWalk WT's (14)				
Frequency of non-eWalk WT's (15)				

Independent Variable (Item #)	Dependent Variable (Item #)	Statistical Analysis
Novice vs. Experienced (1)	eWalk Increased Frequency of WT's (16)	ANOVA
Novice vs. Experienced (1)	eWalk Increased the Quantity of Data (17)	ANOVA
Novice vs. Experienced (1)	eWalk Increased the Quality of Data (18)	ANOVA

C. Does the level of eWalk use have an impact upon administrative perceptions to utilize the walk-through process as intended for formative evaluation?

Independent Variable (Item #)	Dependent Variable (Item #)	Statistical Analysis
Novice vs. Experienced (1)	Formative/Summative (19) -Mean Score	ANOVA
Frequency of eWalk WT's (14)	Formative/Summative (19) -Mean Score	ANOVA

D. Does the level of eWalk use have an impact upon administrative perceptions of themselves as the lead learner of the faculty?

Independent Variable (Item #)	Dependent Variable (Item #)	Statistical Analysis
Novice vs. Experienced (1)	Perception of Lead Learner Practices (20) -Mean Score	ANOVA
Novice vs. Experienced (1)	Functioning as a Professional Learning Community (29) - Mean Score	ANOVA
Frequency of eWalk WT's (14)	Perception of Lead Learner Practices (20) -Mean Score	ANOVA
Frequency of eWalk WT's (14)	Functioning as a Professional Learning Community (29) - Mean Score	ANOVA

Descriptive Research of Practices related Conducting Joint Classroom Walk-throughs

Item Descriptor	Response Options	Mean	Number of Participants	Percentage of Participants
Conduct Joint Walk-throughs (21)				
Members conducting Joint Walk-throughs (22)				
Conducting Joint Walk-throughs Beneficial (23)				
Perceived Benefits of Conducting Joint Walk-throughs (24)				

Descriptive Research of Practices related to Sharing the Walk-through Data Results

Item Descriptor	Response Options	Mean	Number of Participants	Percentage of Participants
Sharing Walk-through Data with Individual Teacher (LL #6)				
Sharing Walk-through Data with Faculty (25)				
Sharing Aggregated Walk-through Data with Faculty (26)				
How the Aggregated Walk-through Data are Shared (27)				
How Often the Aggregated Walk-through Data are Shared (28)				
Sharing Aggregated Walk-through Data with Students (30)				
Sharing Aggregated Walk-through Data with Parents or Community Stakeholders (31)				

E. Does the level of eWalk use have an impact upon changes in administrative perceptions and behaviors connected to the associated practices of the Balanced Leadership framework?

Independent Variable (Item #)	Dependent Variable (Item #)	Statistical Analysis
Novice vs. Experienced (1)	Balanced Leadership Responsibilities (32) -Mean Score	ANOVA
Frequency of eWalk WT's (14)	Balanced Leadership Responsibilities (32) -Mean Score	ANOVA

Researcher's Interest and Role

I am interested in studying the relationship between the use of eWalk (EETT) during classroom walk-throughs and administrators' self-reported perceptions regarding the role in teacher evaluation and in improvement of instruction. I am a practicing assistant principal at a large high school in Iowa and I am faced with the desire and increased pressure under NCLB accountability to dramatically improve student academic achievement. As the assistant principal for curriculum and professional development, I have envisioned the ability to use technology to collect data on instructional practices and implementation data that will influence professional development. I acknowledge my bias, as I perceive that those systematically using electronic evaluation technologies and tools (EETT) will be more likely to perceive that the intent of their walk-throughs is to promote assessment beyond summative evaluations and also recognize the possible uses for formative evaluation purposes. Furthermore, I also believe that the administrators who are consistently using the EETT to collect and analyze data will be more likely to participate in behavior indicative of their role as lead learners for their faculties.

I worked to take measures to reduce possible bias by working with a major professor to review and refine the verbage and the flow of the questionnaire. Additionally, the proposed statistical analyses were reviewed by dissertation committee members to eliminate any possible errors. The data was analyzed to check that there were no confounding variables that may have impacted the results. The major professor was given access to the raw data and was able to review the statistical analysis to ensure the elimination of researcher bias.

Ethical Considerations

To maintain privacy and confidentiality, the Qualtrics survey software is a web-based survey program protected on a secure server with password protection. During the collection and

submission of the data to the web-based Qualtrics secure site, the data was handled by a secure server, and the data and the respondent's anonymity was protected. Furthermore, to maintain privacy and confidentiality the researcher planned to download and convert the information into an Excel worksheet and a SPSS worksheet. No individual respondents were identified as the surveys did not record any personal data or professional information that would identify participants (e.g. the participants name or the school's name). The surveys were randomly assigned an order as the respondents submitted their responses. The on-line survey results had additional password protection within the researcher's Qualtrics account. Any hard copies of the survey and data input results were protected by the researcher who had sole access to the data in a computer password protected computer file kept in a locked filing cabinet. All data will be retained for two years before being destroyed. The primary investigator and the major professor were the only two individuals with access to the raw survey data, results, and reports. Finally, in order to assure that all ethical considerations have been addressed, the proposal was submitted to the Iowa State University Institutional Review Board and has been reviewed and evaluated; the researcher then was granted permission to conduct this study.

Limitations

This research was an initial study to examine the manner and the extent that evaluators are utilizing classroom walk-throughs and eWalk for the purposes of evaluation. This study was limited to school administrators who use Media-X Systems' eWalk software program. Nevertheless, as this was one of the first formal study regarding the use of EETT during classroom walk-throughs, it was likely that the results may be generalized to most other forms of EETT and practices of conducting classroom walk-throughs. There were no parameters placed upon how long the administrator has been in the district and/or held his/her present position. The

researcher, an assistant principal in the FDCSD, conducts walk-throughs as part of his position. The researcher has a presumption that utilizing eWalk (an EETT) in conjunction with classroom walk-throughs will increase an administrator's ability to function as a lead learner of a school in order to impact the teaching and the learning to raise the level of student academic achievement.

Delimitations

The survey aimed to elucidate participants' perceptions of how they utilize walk-throughs; therefore, the data gathered was not observational in nature. This study was not intended to examine the relationship between an evaluator's level of eWalk use during walk-throughs and student achievement within the administrator's building(s). Rather, the intent of the study was to establish initial descriptive data to gain an understanding of the evaluator's behavior and perception of the walk-through process in light of their use of eWalk. Although the study was limited to administrators who use eWalk, it would be logical to conclude that the findings might be generalized to the use of other forms of electronic evaluation technology and tools (EETT) by school administrators.

Summary

This chapter expounded on the process used to design the research methodology for this study. Further details about the design, population and sample, instrumentation, variables, data collection, and data analysis procedures were provided. The next chapter will discuss the results of the data collection and analysis following committee and IRB approval to conduct the survey study of administrators using eWalk in conjunction with classroom walk-throughs.

CHAPTER 4. RESULTS

The purpose of this quantitative research study was to gather the descriptive and inferential statistics of administrative practices and perceptions in conducting classroom walk-throughs in conjunction with the use of eWalk and the impact upon an evaluator's perception and behavior regarding the purpose and intent of the walk-through process. Specifically, this chapter discusses the results of the data collection and the analysis that followed committee and IRB approval for the survey study of administrators who utilized Media-X Systems' eWalk software program with their classroom walk-throughs. Further details about the results expounded upon general demographics, training experiences, behavior associated eWalk and classroom walk-throughs, perception of behaviors associated with formative evaluation, perception of behaviors associated with functioning as a lead learner, perception of behavior-associated practices with the Balanced Leadership framework. This study sought to determine if a relationship existed between the level of use of an administrator conducting walk-throughs with the use of eWalk and the self-reported perceptions about the purposes of formative evaluation, associated lead-learner practices, and practices associated with the Balanced Leadership responsibilities.

This chapter is separated into subsections that address the research questions. The first section expounded upon the participant's general demographic information and illustrated the descriptive data related to professional development for eWalk and classroom walk-throughs. The second section expounded upon the descriptive data related to administrators' behaviors associated with the impact of eWalk and classroom walk-through practices. The third section examined the relationship between the use of eWalk and the perception of the utility of the walk-through process aimed at the purpose of formative evaluation. The fourth section examined the relationship between the use of eWalk and the perception of administrators about functioning as

the lead learners of their faculty. Furthermore, this section examined how the walk-through data was shared with stakeholders and the impact that sharing aggregated walk-through data has upon the practices and behaviors connected to functioning as a professional learning community. In order to extract information concerning school leadership and improving professional learning community practices it was necessary to analyze the extent of the relationship between using eWalk during classroom walk-throughs and the practice of sharing aggregate data and the analysis of the walk-through data results. Further analysis sought to examine the practice of conducting joint walk-throughs. The fifth section examined the evaluators' perceptions of their behavior-associated practices linked to the Balanced Leadership framework in relationship to the use of eWalk with classroom walk-throughs. The sixth section focused upon the analysis of the perception and practices associated with sharing of the aggregate classroom walk-through data gathered with eWalk and the ability for a faculty to function as a professional learning community.

In order to conduct all of the data analyses for the study, several software tools were utilized. Qualtrics has many built-in reports and data analysis tools that were primarily used to examine the descriptive statistics. Additionally, Microsoft Excel 2007 and SPSS version 17.0 were utilized to organize and interpret the data collected. Once the survey data was imported into SPSS, it allowed for the final completion of descriptive and inferential statistical analysis for demographic characteristics and for the initial analysis of relationships between the independent and dependent variables. The descriptive statistics utilized for analysis were distribution frequencies and measures of central tendency. The independent variable is the level of use an administrator has using eWalk determined as a) the frequency (number of self-reported times per week) that one conducts a walk-through while using eWalk b) the level of years of experience

using eWalk and c) the sharing of aggregate walk-through data with the faculty. The inferential statistical analysis used was a one-way analysis of variance (ANOVA) and the Tukey HSD post-hoc test. A p-value of $p < 0.05$ was utilized for determining statistical significance for all of the data analyses conducted. Each section contains the data analysis findings related to the six research questions. The results section does not contain all of the non-significant statistical results that were examined.

Internal Consistently and Reliability of the Survey Questionnaire

The survey contained several sections of questions that aimed to determine administrators' perceptions and behaviors regarding utilization of eWalk during the walk-through process. The questions focused on the intersections between the usage of eWalk and formative evaluation, the role of the principal as lead learner of the faculty, and the practices associated with Marzano's Balanced Leadership framework. Furthermore, the survey contained questions regarding the practices associated with administrative sharing of aggregate classroom walk-through data with teaching faculty and other practices related to joint walk-throughs. Many of the questions in the formative evaluation and lead learner sections were adapted from the work of Downey et al. (2004). Many of the other questions were adapted from the work of Kachur et al. (2010) regarding administrators serving as lead learners of Professional Learning Communities and sharing of aggregate classroom walk-through data.

The survey items were tested to ensure validity and reliability of the questionnaire. A general Cronbach's Alpha test, along with a Cronbach's Alpha Based on Standardized Items test (which included only respondents with valid responses on all of the questions), was used to measure the average correlation of an item with all of the other items in the scale. Tests which resulted in a high alpha (0.7 and higher) indicated that all of the items on the same scale seemed

to be measuring the same construct. To ensure that there was internal consistency and reliability, a Cronbach's Alpha test was conducted on the 36 questions from the three sections of the instrument regarding the intent of classroom walk-throughs for the purpose of formative evaluation, the principal functioning as the lead learner, and the associated practices of the Balanced Leadership framework. With 347 valid respondents, the results yielded an overall Cronbach's Coefficient Alpha score of 0.926 with a Cronbach's Alpha Based on Standarized Items score of 0.937. The robustness of these results ensured that there would be no need to remove any questions from the survey.

To ensure that there was internal consistency and reliability, a separate Cronbach's Alpha was conducted on the section of the instrument regarding the use of classroom walk-throughs for purposes of formative evaluation. This section contained eight items from the questionnaire, with 402 valid respondents. The results yielded an overall Cronbach's Coefficient Alpha score of 0.664 with a Cronbach's Alpha Based on Standardized Items score of .735. The researcher determined from these results that there would not be a need to remove any questions from this section of the survey.

A separate Cronbach's Alpha was conducted on the section of the instrument regarding the role of the administrator as the lead learner of the school. This section contained twelve items from the questionnaire, with 385 valid respondents. The results yielded an overall Cronbach's Coefficient Alpha score of 0.887 with a Cronbach's Alpha Based on Standardized Items score of 0.895, thus ensuring that there would be no need to remove any questions from this section of the survey.

Additionally, a separate Cronbach's Alpha was conducted on the section of the instrument regarding the ten associated practices of Marzano's Balanced Leadership framework.

The section contained 16 questions, with 366 valid respondents. The results yielded an overall Cronbach's Coefficient Alpha score of 0.946 with a Cronbach's Alpha Based on Standardized Items score of 0.947, again ensuring that there would be no need to remove any questions from this section of the survey.

Finally, a separate Cronbach's Alpha was conducted on the section of the instrument regarding the intersection of school faculty's ability to function as a professional learning community with the administrator's sharing of aggregate classroom walk-through data. The section contained four items from the questionnaire, with 221 valid respondents. The results yielded an overall Cronbach's Coefficient Alpha score of 0.755 with a Cronbach's Alpha Based on Standardized Items score of 0.760, thus indicating that there would be no need to remove any questions from this section of the survey.

Response Rate linked to Participants

All of the subjects surveyed in this study were current school administrators who are registered with an eWalk account through Media-X Systems. Media-X Systems allowed for the directory of email addresses for each client to be used for creating a data base directory in Qualtrics; this directory was used for inviting administrators to participate in the survey. The web-based survey was e-mailed; the invitation to participate in the study included a letter of consent and an electronic link to the survey. The targeted population for the study was K-12 building level principals in the states of Iowa, Georgia, and Kentucky that utilize eWalk in conjunction with conducting classroom walk-throughs. The population was contacted via an email containing the cover letter and consent form where participants were the survey was accessed once an administrator indicated willingness to participate.

There were 7,985 original emails sent to the administrators registered with Media-X Systems' eWalk software in the three states. The total sample for the population was adjusted as there were 837 failed emails. Also, 183 subjects were eliminated due to administrator role related issues (e.g. state or district support personnel) and an additional 640 individuals indicated usage issues (e.g. personally or a representative of their district indicated that they no longer use eWalk, never have used eWalk, or have not yet been trained to begin using it, but were planning to use it). This resulted in a new population size of 6,325 possible eWalk users; this number was used to calculate the response rate.

Although the absolute number of respondents was higher than expected, the response rate was lower than anticipated. Despite the researchers best efforts to maximize participation through the response data there were several issues that impeded the response rate. The issues included 1) school district email spam filters that blocked emails originating from the Qualtrics Software Survey's email server; 2) uncovering multiple respondents that actually were not using the eWalk software despite having an account; and 3) the inability to determine how many of the non-respondents fell into category 1 or 2. The first invitation yielded 405 respondents after one week, which was consistent with research indicating that half of most on-line surveys responded within the first day and just over 96% submitted responses within the first two weeks (Hamilton, 2009). After one week, the second invitation was emailed to further remind the remaining administrators to participate; this mailing resulted in 132 more participants. The final invitation was issued three weeks after the inception of the study and resulted in 112 more participants.

There was an adjusted sample size of 6,325 administrators with a registered eWalk account; there were 649 administrators who started the survey resulting in an overall response rate of 10.26% calculated for this study. As Media-X Systems did not have further indentifying

information on the account users, the response rate and analysis was conducted based upon these figures. Of the 649 surveys started, 524 surveys were completed; an additional 125 respondents were eliminated. As the scope of the study was focused upon building level administrators, an additional 113 respondents who identified themselves as working in their district's central office surveys were eliminated. The final data analysis utilized 411 finished surveys for calculating the research findings. When data was missing, that item of the survey was not incorportated into the statistical analysis; rather, that data resulted in calculations based only upon the valid data entered.

Electronic surveys are increasingly resulting in lower response rates for a variety of contributing factors. As web-based surveys have become a more popular medium for distributing surveys via email it is not uncommon to receive response rates at 20 % or lower (Hamilton, 2009; Witmer, Colman, & Katzman, 1999). Furthermore, surveys with larger sample sizes as characterized with more than a 1000 invitations to participate resulted in drastically lower response rates (Hamilton, 2009). Yet, the use of web-based surveys have the advantage of increased response speed without significantly impacting the response rates (Andrews, 2003). The invitation to participate in the study was one-in-the-same as the consent letter for the study allowing for participants to "opt-in" and "opt-out" of the survey, thus adding to the complicating the respondents choice of whether or not to respond (D. A. Dillman, Smyth, & Christian, 2009). Several follow-up reminder e-mails were sent to attempt to increase participation from the initial non-respondents, which is consistent with research on best practices to increase response rates (Andrews, 2003; D. A. Dillman, et al., 2009). To further increase the likelihood for responding, the survey invitation was sent to participants around six o'clock am eastern standard time to ensure delivery at the beginning of the workday (Hamilton, 2009). However, the filtering

software systems for computer servers, hardware configurations, and fear of viruses as well as identity theft scams have impacted participants willingness to respond to web-based surveys (D. A. Dillman, et al., 2009). Hence, it was impossible to determine the exact true number of respondents that had read the invitation and refused to participate (Andrews, 2003). Therefore a sample size with even ten percent response rate would be deemed typical and allow for generalizations to the population for both descriptive and inferential statistical analysis (Andrews, 2003; D. A. Dillman, et al., 2009; Gay & Diehl, 1992; Hamilton, 2009).

Table 4

General Demographic Information

Item Descriptor	Response Options	Number of Participants						Percentage of Participants	
		Elem.		MS/JH		High		Total	
Gender	Male	55		51		65		171	41.9%
	Female	133		54		50		237	58.8%
	Total	188	46.1%	105	25.7%	115	28.2%	408	100.0%
Age	25 to 34	22		15		11		48	11.7%
	35 to 44	75		47		42		164	40.1%
	45 to 54	50		21		40		111	27.0%
	55 to 64	41		22		22		85	20.8%
	65 years +	0		1		0		1	0.0%
	Total	188	46.0%	106	25.9%	115	28.1%	409	100.0%
State of Residence	Georgia	86		66		40		192	46.7%
	Iowa	57		30		36		123	29.9%
	Kentucky	39		10		35		84	20.4%
	Other	6		1		5		12	0.0%
	Total	188	45.7%	107	26.0%	116	28.4%	411	100.0%
Student Enrollment	<300	35		10		19		64	16.20
	300 - 599	88		33		13		134	33.80
	600 - 999	55		43		33		131	33.10
	1000 - 2499	5		16		44		65	16.40
	2500 - 7500	1		0		1		2	0.01
	Valid Total	184	46.5%	102	25.8%	110	27.8%	396	100.00
	No Enrollment Information	4		4		6		14	
	Total	188	45.9%	106	25.9%	116	28.3%	410	

General Demographic Information on Administrators Utilizing eWalk

Basic demographic data were collected, including the gender, age, and educational attainment of participants (see Table 4). Additionally, information was gathered regarding the type of school, size of school, community make-up, and whether or not the school made Adequate Yearly Progress (see Table 5 and Table 6). The general demographic data indicate that there was a gender unbalance with 237 (58.8%) of the 408 participants self-reporting their gender as female. Indeed, there are more men than women in building-level administrative positions throughout the K – 12 education field; this was not reflected in this sample, perhaps due to the high number of responding elementary principals. Of the 409 participants, 164 (40.1%) were between 35 and 44 years old. There did not seem to be an unequal distribution of respondents in age groups across the building levels. The breakdown of administrator state of residence showed that 192 (46.7%) of the respondents originated from Georgia. There were twelve respondents who indicated a state other than Georgia, Iowa, or Kentucky; these were included as they were registered users and the list was generated from Media-X Systems. Therefore, the assumption was that the twelve incorrectly entered their state of residence or that they had moved recently.

Table 5

Demographic Information regarding Setting of District

Item Descriptor	Response Options	Number of Participants	Percentage of Participants
Public or Private School (39)	Public	382	92.9%
	Private	29	7.1%
	Total	411	100.0%
Community Description (40)	Urban	91	22.1%
	Suburban	97	23.6%
	Rural	218	53.0%
	Total	411	100.0%

School Setting

The participants indicated demographic information about their school district (see Table 5). The majority of the building level principals were from public school districts 382 respondents (92.9%) and 218 (53.0%) indicated that they served in rural school districts. With 188 respondents (46.1%), the majority of the participants that responded indicated that they had come from an elementary school, with 105 (25.7) administering a middle school/junior high building, and 116 (28.2%) administrators worked in a high school (see Table 4). Student enrollments ranged from 40 to 4000 students. Participants indicated 66.9 percent of the approximate school enrollments were between 300 and 1000 students. The open-ended school enrollments were grouped according to school setting and school size for data analysis (see Table 4).

Table 6

Demographic Information regarding making Adequate Yearly Progress (AYP)

AYP (2009 – 2010)	Number of Participants	Percentage of Participants
Yes, school made AYP	262	63.7%
No, school did not make AYP	133	32.4%
Not applicable (Outside the United States)	16	3.9%
Total	411	100.0%

Adequate Yearly Progress (AYP)

Lastly, administrators responded to whether or not Adequate Yearly Progress (AYP) was met for the previous 2009 – 2010 school year. The data obtained from the three categories yielded responses indicating that 262 respondents (63.7%) indicated that AYP was achieved, 133 respondents (32.4%) missed AYP, and sixteen respondents (3.9%) choose not to respond or it was not applicable (see Table 6).

Table 7

Demographic Information regarding Years of Administrative Experience

Item Descriptor	Response Options	Number of Participants	Percentage of Participants
Years as an Administrator (37)	1 – 5 years	166	41.2%
	6 – 10 years	120	29.8%
	11 or more years	117	29.0%
	Total	403	100.0%
Years in Present Administrative Position (38)	1 – 5 years	273	67.2%
	6 – 10 years	91	22.4%
	11 or more years	42	10.3%
	Total	406	100.0%

Administrator Years in Position

Descriptive statistics explored the respondents years in an administrative role. Demographic data was further disaggregated by the administrators' building level that containing the information on the years one served as an administrator and the serving years in one's present position. The demographic data, indicates that of the 524 administrators who responded, 411 (79.7%) were building level principals.

First, descriptive statistics were used to analyze administrators' years of experience. The survey of the 403 building level respondents, revealed that 166 (41.2%) had five or less years of experience, 120 (29.8%) administrators had between six to ten years of experience, and 117 (29.0%) had greater than eleven years of experience (see Table 7).

The administrators' years of experience in their present positions also were analyzed. The survey of the 406 respondents revealed that 273 (67.2%) had been in their respective position for five or fewer years, 91 (22.4%) administrators had been in their present position for 6 to 10 years, and 42 more (10.3%) having more than eleven years experience in their present positions. This data are illustrated in Table 7.

Table 8

Demographic Information regarding Highest Educational Degree Attainment

Highest Educational Degree	Number of Participants				Percentage of Participants
	Elem.	Middle/Jr. High	High	Total	
Master's Degree (M.A., M.A.T., M.Ed., M.S.)	78	33	41	152	37.1%
Educational Specialist or professional degree (at least one year beyond master's level)	83	56	56	195	47.6%
Doctoral or first professional degree (Ph.D., Ed.D., etc.)	22	15	18	55	13.4%
Other	5	2	1	8	0.2%
Total	188	106	116	410	100.0%

Educational Degree Attainment

Additional descriptive statistics disaggregated demographic data by level of the respondents' highest attained educational degree. This data are illustrated in Table 8 and shows the information disaggregated by participants' building levels. There were at least 250 respondents (62.0%) indicating that they had obtained a degree higher than a Master's Degree.

Table 9

Classroom Walk-through Training

Item Descriptor	Response Options	Mean (SD)	Number of Participants	Percentage of Participants
WT Formal Training (2)	Yes	1.19 (.40)	331	80.5%
	No		80	19.5%
	Total		411	100.0%
Impact of Formal Training (4)	Strongly Disagree	1.86 (.66)	0	0.0%
	Disagree		5	1.5%
	Neither		37	11.4%
	Agree		191	59.0%
	Strongly Agree		91	28.1%
	Total		324	100.0%
Professional Literature (5)	Yes	1.28 (.45)	295	72.1%
	No		114	27.9%
	Total		409	100.0%

Table 10

Classroom Walk-through Training

Walk-through Training Model	Frequency	Percentage
MCREL's Power Walk-through Training	11	2.7%
360 Degree Walk-through	12	2.9%
Classroom Walk-through Training (CWT)	110	26.8%
Three Minute Walk-through (Downey)	88	21.4%
Management-By-Walking-Around (MBWA)	20	4.9%
Learning Walk	26	6.3%
Data-in-a-Day (DIAD)	0	0.0%
UCLA SMP Classroom Walk-through	1	0.2%
Instructional Practices Inventory (IPI)	44	10.7%
Look 2 Learning (L2L)	1	0.2%
Other:	94	22.9%

Descriptive Research of Training Experiences of Administrators Utilizing eWalk

The descriptive questions regarding professional development allowed the respondents to indicate their level of training in conducting formal classroom walk-throughs. Of the 411 building level administrators, 331 (80.5%) had received formal training in conducting walk-throughs (See Table 9). As illustrated in Table 10, there were over twelve classroom walk-through training models that respondents indicated having received training. Specifically, 110 (33.2%) of the participants had been trained under the Classroom Walkthrough Training (CWT), 88 (26.6%) had received training in the Downey Three-minute model, 44 (13.3.7%) had been trained in the Instructional Practices Inventory (IPI), 26 (7.9%) in the Learning Walk, 20 (6.0%) had received prior training with Management-By-Wandering-Around (MBWA), 25 (7.6%) more had training under a variety of other commonly recognized training models, and 94 (28.4%) more listed another local training model such as Georgia's Department of Education Class Keys (see Table 10). Still, 80 (19.5%) administrators indicated that they had not received any walk-through program training. Of the 324 respondents that had participated in formal walk-through training, 282 (87.1%) indicated by agreeing or strongly agreeing that the training was beneficial (see Table 9).

Professional development in conducting classroom walk-through was not limited to formal walk-through training. There were 295 (72.1%) participants that indicated they had engaged in reading professional literature regarding research and/or training material (articles or books) describing the procedures for conducting classroom walkthroughs (see Table 9).

Table 11

eWalk Training

Item Descriptor	Response Options	Mean (SD)	Number of Participants	Percentage of Participants
eWalk Training (8)	Yes	1.27 (.44)	301	73.2%
	No		110	26.8%
	Total		411	100.0%
Impact of eWalk Training (9)	Strongly Disagree	3.53 (1.25)	44	14.6%
	Disagree		15	5.0%
	Neither		30	10.0%
	Agree		162	53.8%
	Strongly Agree		50	16.6%
	Total		301	100.0%
Need more eWalk Training (10)	Yes	1.53 (.50)	191	46.7%
	No		218	53.3%
			409	100.0%

eWalk Training

The participant's training was further examined to specifically indentify those who had received formal training in how to use the eWalk tool and software. Of the 411 total respondents, 301 (73.2%) self-reported that they had participated in a formal training for eWalk (see Table 11). Furthermore, of the 301 respondents that had received formal eWalk training, 212 (70.4%) indicated that they agreed or strongly agreed that the training had been effective in helping them learn how to use the product. Yet, there were still 191 (46.7%) respondents that indicated a desire for more training on how to utilze eWalk during their classroom walk-throughs. The few general themes derived from the open-ended responses on further training with eWalk indicated that users would like more training on how to navigate the eWalk website, utilizing the reports

and tools, designing templates, follow-up training, managing the logistics regarding the organizations and personnel, strategies and training to communicate the data via email as well as sharing in person with individuals and the entire faculty, in-situ training and guided practice, conducting data analysis, as well as disaggregating the data in order to share and work to improving student academic achievement.

Table 12

Requirements Associated with Administrators Walk-throughs

Item Descriptor	Response Options	Number of Participants				Percentage of Participants
		Elem.	MS/JH	High	Total	
Required Walk-throughs	Yes	156	91	91	338	82.4 %
	No	32	15	25	72	17.6 %
	Total	188	106	116	410	100.0 %
Required eWalk (10)	Yes	111	68	59	238	70.4 %
	No	45	23	32	100	29.6 %
	Total	156	91	91	338	100.0 %

General Information related to Administrator Behaviors Associated with eWalk and Classroom Walk-throughs.

Requirements Associated with Administrator Classroom Walk-throughs

The respondents were asked several survey questions in order to generate an understanding of the general requirements and practices associated with school administrators conducting classroom walk-throughs. The majority of respondents from the survey indicated that they were required to conduct walk-throughs. Of the 410 respondents, 338 (82.4%) indicated that they were required to conduct classroom walk-throughs (see Table 12). Further, of those 338 respondents who were required to conduct walk-throughs, the majority were required to use the eWalk software during classroom walk-throughs. There were 238 (70.4%) of the administrator respondents reporting that they were required to use eWalk. The results did not indicate a major difference in administrator behavior between the building levels.

Table 13

Utilization of Device used to Collect Data

Item Descriptor	Response Options	Mean (SD)	Number of Participants	Percentage of Participants
Device				
	Palm		109	26.5%
	Blackberry		28	6.8%
	Windows Mobile		7	1.7%
	iPhone		39	9.5%
	iPodTouch		146	35.5%
	iPad		60	14.6%
	Wireless laptop using a Browser		57	13.9%
	Off-line client on a laptop/tablet		17	4.1%
	Pen and Paper		60	14.6%
Text Notes		2.30 (.70)		
	Never		55	13.5%
	Always		174	42.8%
	Only when necessary		178	43.7%
	Total		407	100.0%

Utilization of Device used to Collect Data

The results of the basic data collected regarding the type of device used to collect the data for eWalk software during classroom walk-throughs are illustrated in Table 13. Two PDA's that were most popular to use with eWalk were iTouch with 146 (35.5) users and the Palm with 109 (26.5%) users. The data revealed that 245 (46.8%) of the 523 devices used were Apple computer products. Text notes were always taken by 174 (42.8%) administrators and only when necessary for another 178 (43.7%) administrators for a total of 352 (86.5%) of the 407 valid respondents (see Table 13). Still, there were 55 (13.5%) who never took text notes beyond the template checklists.

Table 14

Frequency of Conducting Walk-throughs

Item Descriptor	Response Options	Mean	Number of Participants				Percentage of Participants
			Elem.	MS/JH	High	Total	
Frequency of Total WT's (13)		2.00 (1.18)					
	1 – 5 Walk-throughs		78	43	54	175	43.1%
	6 – 10 Walk-throughs		61	35	36	132	32.5%
	11 – 15 Walk-throughs		27	14	9	50	12.3%
	16 -20 Walk-throughs		6	9	6	21	5.2%
	21 or more Walk-throughs		12	5	11	28	6.9%
	Total		184	106	116	406	100.0%
Frequency of eWalk WT's (14)		1.53 (.95)					
	1 – 5 Walk-throughs		117	60	70	247	63.7%
	6 – 10 Walk-throughs		41	25	21	87	22.4%
	11 – 15 Walk-throughs		16	11	7	34	8.8%
	16 -20 Walk-throughs		3	3	3	9	2.3%
	21 or more Walk-throughs		3	2	6	11	2.8%
	Total		180	101	107	388	100.0%
Frequency of non-eWalk WT's (15)		1.51 (.96)					
	1 – 5 Walk-throughs		115	63	70	248	71.3%
	6 – 10 Walk-throughs		18	19	16	53	15.2%
	11 – 15 Walk-throughs		17	6	7	30	8.6%
	16 -20 Walk-throughs		1	2	2	5	1.4%
	21 or more Walk-throughs		8	3	1	12	3.4%
	Total		159	93	96	348	100.0%

Table 15

Level of Experience of Conducting Classroom Walk-throughs with the use of eWalk by Frequency

Frequency of eWalk WT's	Response Options	Mean	Number of Participants	Percentage of Participants
Elementary	1 – 5 Walk-throughs		117	65.0%
	6 – 10 Walk-throughs		41	22.8%
	11 – 15 Walk-throughs		16	8.9%
	16 -20 Walk-throughs		3	1.7%
	21 or more Walk-throughs		3	1.7%
			180	100.0%
Middle	1 – 5 Walk-throughs		60	59.4%
	6 – 10 Walk-throughs		25	24.8%
	11 – 15 Walk-throughs		11	10.9%
	16 -20 Walk-throughs		3	3.0%
	21 or more Walk-throughs		2	2.0%
			101	100.0%
High	1 – 5 Walk-throughs		70	65.4%
	6 – 10 Walk-throughs		21	19.6%
	11 – 15 Walk-throughs		7	6.5%
	16 -20 Walk-throughs		3	2.8%
	21 or more Walk-throughs		6	5.6%
			107	100.0%
Total	1 – 5 Walk-throughs		247	63.7%
	6 – 10 Walk-throughs		87	22.4%
	11 – 15 Walk-throughs		34	8.8%
	16 -20 Walk-throughs		9	2.3%
	21 or more Walk-throughs		11	2.8%
			388	100.0%

Level of Experience Conducting Classroom Walk-Throughs with eWalk

There were several questions that allowed the participants to self-report the frequency that walk-throughs were conducted, with, and without, the use of eWalk software. The majority of the 406 respondents (75.6%) reported that they averaged conducting ten or less total weekly classroom walk-throughs with or without utilizing the eWalk software (see Table 14). The majority of respondents, 301 of the 348 respondents (86.5%), indicated that they averaged ten or less weekly walk-throughs without utilizing the eWalk software. As illustrated in Table 14, a clear majority 334 of the 388 respondents (86.1%) averaged ten or less weekly classroom walk-

throughs while utilizing the eWalk software to record the data. Only 54 (13.9%) of the 388 evaluators responded that each week they conduct more than ten walk-throughs with the use of eWalk. The general trends in the number of walk-throughs, especially those conducted with the use of eWalk, illustrate little variation in the frequency of administrators at different building levels to conduct classroom walk-throughs (see Table 15).

Table 16

Level of Experience of Conducting Classroom Walk-throughs with the use of eWalk by Years

Novice vs. Experienced	Response Options	Mean	Number of Participants	Percentage of Participants
Elementary	0 – 2 years	1.28	134	71.7%
	3 or more years		53	28.3%
	Total		187	100.0% (45.2%)
Middle	0 – 2 years	1.32	73	68.2%
	3 or more years		34	31.8%
	Total		107	100.0% (26.6%)
High	0 – 2 years	1.29	82	70.7%
	3 or more years		34	29.3%
	Total		116	100.0% (28.2%)
Total	0 – 2 years	1.30	289	70.5%
	3 or more years		121	29.5%
	Total		410	100.0%

Years of Experience

There was one question that allowed for the participants to self-report their years of experience in conducting classroom walk-throughs with the use of the eWalk software product. There were 289 (70.5%) of the administrator respondents reporting that they had two or less years of experience in utilizing the eWalk software (see Table 16). There were 121 (29.5%) of the administrator respondents reporting that they had three or more years of experience in utilizing the eWalk software. The trends in the level of experience, as defined by years of

experience utilizing eWalk while conducting classroom walk-throughs, did not show a difference in practice or perception of the walk-through process. There was a discrepancy among number of users in regards to level of experience with nearly two novice users (approximately 70%) to each experienced administrator (approximately 30%) regardless of the building level (see Table 16).

Table 17

Impact of eWalk on Classroom Walk-through Practices

Item Descriptor	Response Options	Mean (SD)	Number of Participants	Percentage of Participants
Increased Frequency of WT's (16)		1.46 (.50)		
	Yes		218	53.8%
	No		187	46.2%
	Total		405	100.0%
Increased the Quantity of Data (17)		1.21 (.41)		
	Yes		321	79.3%
	No		84	20.7%
	Total		405	100.0%
Increased the Quality of Data (18)		1.25 (.43)		
	Yes		305	75.3%
	No		100	24.7%
	Total		405	100.0%

Impact of eWalk on Classroom Walk-through Practices

The data was analyzed by respondents to determine the impact of whether or not beginning to use the eWalk software product during classroom walk-throughs has increased the frequency and impacted the quantity and the quality of data. Of the 405 respondents, the survey resulted in a breakdown of 218 (53.8%) indicating that with eWalk available they have increased the frequency of walk-throughs conducted and 187 (46.2%) indicating that they have not increased the frequency of walk-throughs (see Table 17). Of the 405 respondents, there were 321 (79.3%) indicating that with eWalk available they have increased the quantity of collectible data during walk-throughs with 84 (20.7%) indicating that it did not increase the quantity of data collected. Of the 405 respondents, there were 305 (75.3%) indicating that with eWalk available

they have increased the quality of data collected during walk-throughs with 100 (24.7%) indicating that it did not increase the quality of data collected. There were no statistically significant differences between the years of experience in using eWalk and the impact on changing classroom walk-through practices.

Table 18

Perception of Formative Evaluation Function for Conducting Walk-throughs by Frequency

Item Descriptor	Response Options	N	Mean	Std. Dev.	df	f	p	95% Confidence Interval LB	UB
Most of my walk-throughs typically last 3 minutes or less.	Total	384	2.63	1.30	4 379 383	1.622	.168	2.50	2.76
I collect data on the teacher's adjustments to students' learning needs during the lesson.	Total	384	3.68	.89	4 379 383	1.351	.250	3.60	3.77
I collect data on the teacher's decision-making during the lesson.	Total	384	3.57	.91	4 379 383	1.303	.268	3.47	3.66
I collect data on students' engagement during the lesson.	Total	383	4.40	.64	4 378 382	.782	.538	4.34	4.46
I collect data on students' academic learning during the lesson.	Total	384	4.07	.77	4 379 383	1.047	.383	3.99	4.14
I am more likely to visit classrooms at unscheduled times throughout the day than I am with more formal teacher observations.	Total	384	4.30	.78	4 379 383	2.123	.077	4.22	4.38
The data I collect is used for professional growth of the teacher.	Total	382	4.10	.79	4 377 381	1.186	.317	4.03	4.18
The data I collect helps me coach the teacher regarding instructional practices.	Total	383	4.19	.69	4 378 382	1.398	.234	4.12	4.26
Form Mean	Total	383	3.86	.46	4 378 382	1.051	.381	3.82	3.91

Table 19

Perception of Formative Evaluation Function for Conducting Walk-throughs by Years

Item Descriptor	Response Options	N	Mean	Std. Dev.	df	f	p	95% Confidence Interval LB	UB
Most of my walk-throughs typically last 3 minutes or less.	0 - 2 years	284	2.51	1.27	1	5.665	.018	2.36	2.66
	3 + years	121	2.84	1.33	403			2.60	3.08
	Total	405	2.61	1.29	404			2.48	2.74
I collect data on the teacher's adjustments to students' learning needs during the lesson.	0 - 2 years	284	3.73	.89	1	4.511	.034	3.63	3.84
	3 + years	121	3.53	.88	403			3.37	3.69
	Total	405	3.67	.89	404			3.59	3.76
I collect data on the teacher's decision-making during the lesson.	0 - 2 years	284	3.60	.90	1	2.256	.134	3.50	3.71
	3 + years	121	3.45	.92	403			3.29	3.62
	Total	405	3.56	.91	404			3.47	3.65
I collect data on students' engagement during the lesson.	0 - 2 years	284	4.37	.71	1	.344	.558	4.28	4.45
	3 + years	120	4.41	.53	402			4.31	4.50
	Total	404	4.38	.66	403			4.31	4.44
I collect data on students' academic learning during the lesson.	0 - 2 years	284	4.04	.82	1	.136	.713	3.94	4.13
	3 + years	120	4.07	.69	402			3.94	4.19
	Total	404	4.04	.78	403			3.97	4.12
I am more likely to visit classrooms at unscheduled times throughout the day than I am with more formal teacher observations.	0 - 2 years	284	4.24	.84	1	3.320	.069	4.14	4.34
	3 + years	121	4.40	.69	403			4.27	4.52
	Total	405	4.29	.80	404			4.21	4.36
The data I collect is used for professional growth of the teacher.	0 - 2 years	283	4.09	.83	1	.009	.923	3.99	4.19
	3 + years	120	4.08	.76	401			3.95	4.22
	Total	403	4.09	.81	402			4.01	4.17
The data I collect helps me coach the teacher regarding instructional practices.	0 - 2 years	283	4.16	.74	1	2.531	.112	4.07	4.25
	3 + years	121	4.28	.62	402			4.17	4.39
	Total	404	4.20	.71	403			4.13	4.26
Form Mean	0 - 2 years	283	3.84	.50	1	.334	.564	3.78	3.90
	3 + years	120	3.87	.42	401			3.80	3.95
	Total	403	3.85	.48	402			3.80	3.90

Analysis of the Purpose and Perceptions for the Classroom Walk-Through Process: Research Questions and Hypotheses

The analysis was done to determine if a statistically significant relationship existed to answer the question: How does the use of the eWalk impact the evaluators' perceptions and behaviors regarding the purpose and intent of the walk-through process? In particular:

3. **Does the level of eWalk use have an impact upon administrative perceptions to utilize the walk-through process as intended for formative evaluation?**

   Null-Hypothesis: There is no statistically significant relationship between the level of eWalk use and a higher perception by the administrator to utilize the walk-through process as intended for formative evaluation.

To test the null hypothesis for the research questions, descriptive data was compiled and inferential statistics were utilized. The survey questionnaire had participants rate their level of agreement with each of the eight statements related to conducting classroom walk-throughs for the purpose of formative evaluation. Respondents rated their level of agreement on a five-point Likert scale with 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree or Disagree, 4 = Agree, and 5 = Strongly Agree. The first independent variable was the level of eWalk use as determined by the frequency of conducting classroom walk-throughs with the use of eWalk. Skretta (2007) had used *conducting five walk-throughs weekly* as the numerical cut-off point to determine the rate of conducting classroom walk-throughs. For this study, those administrators were further divided into the frequency categories of conducting five or fewer, six to ten, eleven to fifteen, sixteen to twenty, and twenty-one or more walk-throughs with the use of eWalk. The second independent variable was the level of use as determined by the years of experience conducting

classroom walk-throughs with the use of eWalk. A p-value of $p < 0.05$ was utilized for determining statistical significance for all of the data analyses conducted.

First, a one way analysis of variance (ANOVA) was used to determine if a significant relationship existed between the frequency of an administrator conducting a walk-through with the use of eWalk and the self-reported responses to the perception of classroom walk-throughs for the purpose of formative evaluation. The ANOVA is prone to error under the assumption that data responses are interval or ratio (numbered data with equal intervals between values) (Gravetter & Wallnaue, 2000). None of the formative evaluation stem questions resulted in any statistical difference between the level of frequency in conducting walk-throughs with eWalk and the difference the mean perceptions for the associated behavior and practices. The responses for the eight item stem questions related to the administrators perception of walk-throughs for the purpose of formative evaluation were averaged and resulted in an overall mean of 3.86 and a standard deviation of .46 (see Table 18). The perception of classroom walk-throughs for the function of formative evaluation did not report significant differences between the level of frequency of conducting walk-throughs $F(4, 378) = 1.051$, $p = .381$.

Secondly, a one way analysis of variance (ANOVA) was used to determine if a significant relationship existed between the years of experience an administrator had conducting walk-throughs with the use of eWalk and the self-reported responses to the perception of classroom walk-throughs for the purpose of formative evaluation. Only two of the formative evaluation stem questions resulted a statistical difference between the level of years of experience using eWalk during walk-throughs and the difference the mean perceptions for the associated behavior and practices. There was a statistical difference regarding the length of time for walk-throughs to last three minutes or less between those having less than two years

experience (M = 2.51, SD = 1.27) and those with more than three years experience (M = 2.84, SD = 1.33).

The difference in length of time spent in the classroom during walk-throughs was statistically significant with a result of F (1, 403) = 5.665, p = .018. There was a statistical difference regarding the collection of data on teacher's adjustments to students' learning needs during the lesson between those having less than two years experience (M = 3.73, SD = .89) and those with more than three years experience (M = 3.53, SD = .88). The difference in collection of data on teacher's adjustments to students' learning needs during the lesson was statistically significant with a result of F (1, 403) = 4.511, p = .034.The responses for the eight item stem questions related to the administrators perception of walk-throughs for the purpose of formative evaluation were averaged and resulted in an overall mean of 3.85 and a standard deviation .48 (see Table 19). The evaluators did not report a significant difference regarding the conducting walk-throughs for the purposes of formative evaluation F (1, 401) = 0.334, p = .564. Hence, the null hypothesis that there is no statistically significant relationship in the increased level of eWalk use and a higher perception by the evaluator to utilize the walk-through process as intended for formative evaluation, rather than summative evaluation, is not rejected.

Table 20

Perception of Walk-throughs to function as a Lead Learner by Frequency

Item Descriptor	Response Options	N	Mean	Std. Dev.	d	f	p	95% Conf. Interval LB	UB
The walk-through data I collect is used to inform the professional development needs of the teacher.	Total	382	3.93	.79	4 377 381	.725	.576	3.86	4.01
Building-level professional development is based on the walk-through data that administrators collect.	Total	382	3.61	.91	4 377 381	1.071	.370	3.52	3.70
District-level professional development is based on the walk-through data that administrators collect.	Total	380	3.18	.98	4 375 379	.583	.675	3.08	3.28
The use of classroom walk-throughs helps teachers reflect on the effectiveness of their instruction.	Total	379	3.91	.68	4 374 378	1.161	.328	3.84	3.98
The use of classroom walk-throughs improves the academic learning of students in my school.	Total	381	3.83	.73	4 376 380	1.470	.211	3.75	3.90
I follow-up with teachers to discuss their professional growth and we use trend data from multiple walk-throughs to frame the conversation.	Total	377	3.63	.88	4 372 376	1.406	.231	3.54	3.72
Teachers find classroom walk-throughs to be valuable to them as professionals.	Total	380	3.53	.75	4 375 379	1.155	.330	3.45	3.60
The use of classroom walk-throughs increases my ability to be an instructional leader.	Total	380	4.16	.66	4 375 379	.956	.431	4.09	4.23
The data collected helps me have better conversations with my teachers about instruction.	Total	378	4.20	.63	4 373 377	1.542	.189	4.13	4.26
The data collected allows our conversations about instruction to be more objective rather than subjective.	Total	380	4.19	.63	4 375 379	.133	.970	4.13	4.25
More collegial relationships between teachers and administrators are fostered.	Total	380	3.63	.77	4 375 379	1.407	.231	3.55	3.71
I have a greater awareness of teaching and learning within my school.	Total	376	4.22	.67	4 371 375	1.298	.270	4.15	4.28
Lead Learner Mean	Total	381	3.83	.50	4 376 380	.853	.492	3.78	3.88

Table 21

Perception of Walk-throughs as a function as a Lead Learner by Years

Item Descriptor	Response Options	N	Mean	Std. Dev.	df	f	p	95% Confidence Interval LB	UB
The walk-through data I collect is used	0 - 2 years	282	3.93	.83	1	.034	.853	3.84	4.03
to inform the professional development	3 + years	120	3.92	.69	400			3.79	4.04
needs of the teacher.	Total	402	3.93	.79	401			3.85	4.01
Building-level professional	0 - 2 years	282	3.63	.90	1	.233	.629	3.53	3.74
development is based on the walk-	3 + years	120	3.58	.94	400			3.41	3.75
through data that administrators	Total	402	3.62	.91	401			3.53	3.71
collect.									
District-level professional development	0 - 2 years	281	3.23	.97	1	4.221	.041	3.12	3.35
is based on the walk-through data that	3 + years	120	3.02	.98	399			2.84	3.19
administrators collect.	Total	401	3.17	.98	400			3.07	3.27
The use of classroom walk-throughs	0 - 2 years	281	3.94	.70	1	1.433	.232	3.86	4.02
helps teachers reflect on the	3 + years	119	3.85	.68	398			3.72	3.97
effectiveness of their instruction.	Total	400	3.91	.69	399			3.84	3.98
The use of classroom walk-throughs	0 - 2 years	282	3.84	.75	1	.361	.548	3.75	3.93
improves the academic learning of	3 + years	120	3.79	.73	400			3.66	3.92
students in my school.	Total	402	3.83	.74	401			3.75	3.90
I follow-up with teachers to discuss	0 - 2 years	282	3.66	.87	1	1.346	.247	3.55	3.76
their professional growth and we use	3 + years	116	3.54	.91	396			3.38	3.71
trend data from multiple walk-throughs	Total	398	3.62	.88	397			3.54	3.71
to frame the conversation.									
Teachers find classroom walk-throughs	0 - 2 years	282	3.55	.75	1	.843	.359	3.46	3.64
to be valuable to them as professionals.	3 + years	118	3.47	.72	398			3.34	3.61
	Total	400	3.53	.75	399			3.45	3.60
The use of classroom walk-throughs	0 - 2 years	281	4.15	.70	1	.002	.967	4.07	4.24
increases my ability to be an	3 + years	120	4.15	.59	399			4.04	4.26
instructional leader.	Total	401	4.15	.67	400			4.09	4.22
The data collected helps me have better	0 - 2 years	280	4.20	.68	1	.266	.606	4.12	4.28
conversations with my teachers about	3 + years	119	4.16	.58	397			4.05	4.27
instruction.	Total	399	4.19	.65	398			4.12	4.25
The data collected allows our	0 - 2 years	281	4.17	.66	1	.133	.716	4.10	4.25
conversations about instruction to be	3 + years	120	4.20	.60	399			4.09	4.31
more objective rather than subjective.	Total	401	4.18	.64	400			4.12	4.25
More collegial relationships between	0 - 2 years	281	3.63	.81	1	.140	.708	3.53	3.72
teachers and administrators are	3 + years	120	3.66	.72	399			3.53	3.79
fostered.	Total	401	3.64	.78	400			3.56	3.71
I have a greater awareness of teaching	0 - 2 years	277	4.20	.69	1	.048	.827	4.12	4.28
and learning within my school.	3 + years	119	4.22	.67	394			4.10	4.34
	Total	396	4.21	.68	395			4.14	4.27
Lead Learner Mean	0 - 2 years	282	3.84	.54	1	.874	.350	3.78	3.91
	3 + years	119	3.79	.46	399			3.71	3.87
	Total	401	3.83	.51	400			3.78	3.88

4. **Does the level of eWalk use have an impact upon administrative perceptions of themselves as the lead learner of the faculty?**

Null Hypothesis: There is no statistically significant relationship of the administrators to self-report themselves as the lead learner of the faculty due to the level of eWalk use.

To test the null hypothesis for the research questions, descriptive data was compiled and inferential statistics were utilized. The survey questionnaire had participants rate their level of agreement with each of the twelve statements related to conducting classroom walk-throughs for the function and practices related to the perception of their roles as the lead learners of their school. Respondents rated their level of agreement on a five-point Likert scale with 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree or Disagree, 4 = Agree, and 5 = Strongly Agree.

First, a one way analysis of variance (ANOVA) was used to determine if a significant relationship existed between the frequency of an administrator conducting a walk-through with the use of eWalk and the function and practices related to the perception of their role as the lead learner of the school. None of the lead learner stem questions resulted in any statistical difference between the level of frequency in conducting walk-throughs with eWalk and the difference the mean perceptions for the associated behavior and practices (see Table 20). The responses for the twelve item stem questions related to the administrators perception of walk-throughs for the purpose of functioning as a lead learner were averaged and resulted in an overall mean of 3.83 and a standard deviation .50 (see Table 20). The perception of classroom walk-throughs for the function as the lead learner did not indicate significant differences between the level of frequency of conducting walk-throughs, F (4, 376) = .853, p = .492.

To further test the null hypothesis for the research question, a second one way analysis of variance (ANOVA) was used to determine if a significant relationship existed between the years

of experience an administrator had conducting walk-throughs with the use of eWalk and the function and practices related to the perception of one's self as the lead learner. Only one of the lead learner stem questions resulted a statistical difference between the level of years of experience using eWalk during walk-throughs and the difference the mean perceptions for the associated behavior and practices. There was a statistical difference regarding district-level professional development being based on the walk-through data between those having less than two years experience (M = 3.23, SD = .97) and those with more than three years experience (M = 3.02, SD = .98). The difference in regarding district-level professional development being based on the walk-through data was statistically significant with a result of F (1, 399) = 4.221, p = .041. The responses for the twelve item stem questions related to the administrators perception of walk-throughs for the purpose of functioning as a lead learner were averaged and resulted in an overall mean of 3.84 and a standard deviation .54 (see Table 21). The perception of classroom walk-throughs for the function as the lead learner did not result in significant differences between the level of use as determined by years of experience with eWalk F (4, 399) = .874, p = .350. Hence, the null hypothesis that there is no statistically significant relationship in the increased level of eWalk use and a higher perception by the evaluator to utilize the walk-through process as intended to function as the lead learner is not rejected.

Table 22

Descriptive Research of Practices related Conducting Joint Classroom Walk-throughs

Item Descriptor	Response Options	Mean	Number of Participants	Percentage of Participants
Conduct Joint Walk-throughs (21)		1.46 (.50)		
	Yes		233	54.3%
	No		188	45.7%
	Total		411	100.0%
Members conducting Joint Walk-throughs (22)				
	Other administrators in the building		156	67.0%
	Other administrators in the district		154	66.1%
	Other administrators outside the district		28	12.0%
	Teachers		61	26.2%
	Students		2	0.9%
	Parents or other community stakeholders		6	2.5%
Conducting Joint Walk-throughs Beneficial (23)				
	Yes		212	95.5%
	No		10	4.5%
	Total		222	100.0%
Perceived Benefits of Conducting Joint Walk-throughs (24)				
	To ensure cross-observer reliability		165	74.0%
	To offer a different perspective on what was observed		181	81.2%
	To share experiences and knowledge from other settings		139	62.3%
	Other (please describe)		6	2.7%

Table 23

Conducting Joint Classroom Walk-throughs and the Influence upon Associated Practices

Item Descriptor	Response Options	N	Mean	Std. Dev.	df	f	p	95% Confidence Interval Lower Bound	Upper Bound
Form Mean	Yes	219	3.86	.45	1	.191	.662	3.80	3.92
	No	185	3.84	.51	402			3.77	3.91
	Total	404	3.85	.48	403			3.81	3.90
Lead Learner Mean	Yes	219	3.88	.51	1	4.224	.041	3.81	3.94
	No	183	3.77	.52	400			3.70	3.85
	Total	402	3.83	.51	401			3.78	3.88
Balanced Leadership Mean	Yes	210	3.64	.49	1	4.029	.045	3.57	3.71
	No	178	3.54	.55	386			3.45	3.62
	Total	388	3.59	.52				3.64	387.00

Joint Classroom Walk-throughs

The practice of conducting joint classroom walk-throughs was further examined to indentify descriptive research regarding perceptions and factors. Of the 411 respondents, 233 (54.3%) self-reported that they had participated in a conducting a joint walk-through (see Table 22). Furthermore, of the 233 respondents that had participated in a joint walk-through, 156 (67.0%) indicated that they had done so with other administrators in the building, 154 (66.1%) with other administrators from the district, 28 (12.0%) with other administrators from outside of the district, 61 (26.2%) indicated that they had done so with teachers, 2 (1.0%) indicated that they had done so with students, and 6 (2.5%) indicated that they involved parents or other community stakeholders.

Additionally, of the 233 respondents that had participated in a joint walk-through 222 responded regarding the potential perception of the benefit. The results indicated that 212 (95.5%) administrators perceived conducting joint walk-throughs as beneficial with only 10 (4.5%) indicating that they did not believe conducting joint walk-throughs were beneficial.

Furthermore, of the 212 administrators indicating that they perceived a benefit from conducting joint classroom walk-throughs descriptive data expounded upon these perceived benefits. Respondents indicated that conducting joint classroom walk-throughs were beneficial in offering a different perspective on what was observed with 181 respondents (81.2%), 165 respondents (74.0%) believed that the practice was beneficial to ensure cross-observer reliability; and six respondents (2.7%) indicated other benefits including themes related to monitoring curriculum and instructional practices, determining professional development needs, and examining other administrator's ability to access classroom instruction.

A one way analysis of variance (ANOVA) was used to determine if a significant relationship existed between conducting joint classroom walk-throughs and the function and practices related to walk-throughs for the purpose of formative evaluation, the perception of one's self as the lead learner, and the impact upon practices associated with the Balanced Leadership framework. The perception of one's self as the lead learner and the impact upon Balanced Leadership practices resulted in a statistically significant difference between those that have and have not conducted joint classroom walk-throughs (see Table 23). The statistical difference regarding the perception of a lead learner for 219 of those having conducted joint walk-throughs (M = 3.88, SD = .51) and 185 of those who do not participate (M = 3.77, SD = .52). The difference in the lead learner mean for those conducting joint classroom walk-throughs was statistically significant with a result of F (1, 400) = 4.224, p = .041. Hence, the null hypothesis that there is no statistically significant relationship in the practice of conducting joint walk-throughs by administrators as related to the function as the

lead learner is rejected. The statistical difference regarding the perception of practices associated with the Balanced Leadership framework for 210 of those having conducted joint walk-throughs (M = 3.64, SD = .49) and 178 of those who do not participate (M = 3.54, SD = .55). The difference in the Balanced Leadership mean for those conducting joint classroom walk-throughs was statistically significant with a result of F (1, 386) = 4.029, p = .045. Hence, the null hypothesis that there is no statistically significant relationship in the practice of conducting joint walk-throughs by administrators as related to the practices associated with the Balanced Leadership framework is rejected.

Table 24

Impact of eWalk use on Practices Associated with Balanced Leadership by Frequency

Item Descriptor	Response Options	N	Mean	Std. Dev.	df	f	p	95% Confidence Interval LB	UB
I am directly involved in helping teachers design curricular activities for their classes.	Total	366	3.44	.66	4 361 365	.458	.767	3.37	3.51
I make systematic and frequent visits to classrooms.	Total	368	3.78	.67	4 363 367	2.523	.041	3.71	3.85
Individuals in my school who excel are recognized and rewarded.	Total	366	3.42	.61	4 361	1.255	.288	3.36	3.48
Teachers in my school have direct input into all important decisions.	Total	367	3.45	.66	4 362	2.461	.045	3.38	3.52
I am aware of the personal needs of the teachers in my school.	Total	367	3.63	.61	4 362 366	.813	.518	3.56	3.69
I try to inspire my teachers to accomplish things that might seem beyond their grasp.	Total	365	3.67	.67	4 360 364	.637	.636	3.60	3.73
The teachers in my school are aware of my beliefs regarding schools, teaching, and learning.	Total	366	3.71	.70	4 361 365	1.114	.350	3.64	3.78
I continually monitor the effectiveness of our curriculum.	Total	364	3.68	.67	4 359	.625	.645	3.62	3.75
I am directly involved in helping teachers address instructional issues in their classrooms.	Total	366	3.69	.67	4 361 365	1.268	.282	3.62	3.76
Seniority is not the primary method of reward and advancement in my school.	Total	367	3.37	.87	4 362 366	.530	.714	3.28	3.46
I continually monitor the effectiveness of the instructional practices used in our school.	Total	368	3.75	.68	4 363 367	1.157	.330	3.68	3.82
I encourage people to express opinions that are contrary to my own.	Total	368	3.62	.65	4 363	.864	.486	3.56	3.69
I am directly involved in helping teachers address assessment issues in their classrooms.	Total	367	3.63	.64	4 362 366	.409	.802	3.56	3.69
I continually monitor the effectiveness of the assessment practices used in my school.	Total	366	3.64	.62	4 361 365	.194	.942	3.58	3.70
I adapt my leadership style to the specific needs of a given situation.	Total	366	3.68	.67	4 361	.425	.791	3.61	3.75
We systematically have discussions in my school about current research and theory.	Total	366	3.52	.71	4 361 365	.360	.837	3.45	3.59
Balanced Leadership Mean	Total	369	3.60	.52	4 364 368	1.037	.388	3.54	3.65

Table 25

Impact of eWalk use on Practices Associated with Balanced Leadership by Years

Item Descriptor	Response Options	N	Mean	Std Dev.	df	f	p	95% Confidence Interval LB	UB
I am directly involved in helping teachers design curricular activities for their classes.	0 - 2 years	267	3.44	.67	1	.103	.749	3.36	3.52
	3 + years	117	3.46	.64	382			3.34	3.58
	Total	384	3.45	.66	383			3.38	3.51
I make systematic and frequent visits to classrooms.	0 - 2 years	268	3.73	.68	1	2.819	.094	3.65	3.81
	3 + years	118	3.86	.66	384			3.74	3.98
	Total	386	3.77	.67	385			3.70	3.84
Individuals in my school who excel are recognized and rewarded.	0 - 2 years	267	3.38	.63	1	1.957	.163	3.31	3.46
	3 + years	117	3.48	.61	382			3.37	3.59
	Total	384	3.41	.62	383			3.35	3.47
Teachers in my school have direct input into all important decisions.	0 - 2 years	268	3.42	.68	1	1.365	.243	3.34	3.50
	3 + years	117	3.50	.64	383			3.39	3.62
	Total	385	3.44	.67	384			3.38	3.51
I am aware of the personal needs of the teachers in my school.	0 - 2 years	266	3.58	.61	1	4.152	.042	3.51	3.66
	3 + years	118	3.72	.61	382			3.61	3.83
	Total	384	3.63	.61	383			3.56	3.69
I try to inspire my teachers to accomplish things that might seem beyond their grasp.	0 - 2 years	264	3.68	.70	1	.623	.430	3.59	3.76
	3 + years	118	3.62	.63	380			3.50	3.73
	Total	382	3.66	.68	381			3.59	3.73
The teachers in my school are aware of my beliefs regarding schools, teaching, and learning.	0 - 2 years	266	3.69	.70	1	1.027	.312	3.60	3.77
	3 + years	116	3.77	.70	380			3.64	3.90
	Total	382	3.71	.70	381			3.64	3.78
I continually monitor the effectiveness of our curriculum.	0 - 2 years	264	3.68	.68	1	.020	.887	3.60	3.76
	3 + years	117	3.69	.64	379			3.58	3.81
	Total	381	3.69	.67	380			3.62	3.75
I am directly involved in helping teachers address instructional issues in their classrooms.	0 - 2 years	266	3.67	.70	1	.241	.624	3.59	3.76
	3 + years	117	3.71	.60	381			3.60	3.82
	Total	383	3.68	.67	382			3.62	3.75
Seniority is not the primary method of reward and advancement in my school.	0 - 2 years	266	3.34	.86	1	1.255	.263	3.24	3.45
	3 + years	118	3.45	.86	382			3.29	3.61
	Total	384	3.38	.86	383			3.29	3.46
I continually monitor the effectiveness of the instructional practices used in our school.	0 - 2 years	267	3.72	.70	1	2.031	.155	3.63	3.80
	3 + years	118	3.82	.62	383			3.71	3.94
	Total	385	3.75	.68	384			3.68	3.82
I encourage people to express opinions that are contrary to my own.	0 - 2 years	267	3.61	.68	1	.280	.597	3.53	3.70
	3 + years	118	3.65	.60	383			3.54	3.76
	Total	385	3.63	.65	384			3.56	3.69
I am directly involved in helping teachers address assessment issues in their classrooms.	0 - 2 years	265	3.66	.67	1	1.427	.233	3.58	3.74
	3 + years	118	3.58	.56	381			3.47	3.68
	Total	383	3.63	.64	382			3.57	3.70
I continually monitor the effectiveness of the assessment practices used in my school.	0 - 2 years	265	3.64	.65	1	.108	.743	3.56	3.72
	3 + years	118	3.62	.57	381			3.51	3.72
	Total	383	3.63	.63	382			3.57	3.70
I adapt my leadership style to the specific needs of a given situation.	0 - 2 years	265	3.66	.70	1	.534	.465	3.57	3.74
	3 + years	118	3.71	.64	381			3.59	3.83
	Total	383	3.67	.68	382			3.61	3.74
We systematically have discussions in my school about current research and theory.	0 - 2 years	267	3.51	.73	1	.003	.958	3.43	3.60
	3 + years	116	3.52	.67	381			3.39	3.64
	Total	383	3.51	.71	382			3.44	3.59
Balanced Leadership Mean	0 - 2 years	270	3.58	.55	1	.880	.349	3.51	3.64
	3 + years	117	3.63	.46	385			3.55	3.72
	Total	387	3.59	.52	386			3.54	3.65

5. **Does the level of eWalk use have an impact upon changes in administrative perceptions and behaviors connected to the associated practices of the Balanced Leadership framework?**

Null Hypothesis: There is no statistically significant change in administrators' behaviors regarding the associated practices that are linked to the Balanced Leadership framework due to the level of eWalk use.

To test the null hypothesis for the research questions descriptive data was compiled and inferential statistics were utilized. The survey questionnaire had participants rate their level of agreement with each of the sixteen statements related to the impact of conducting classroom walk-throughs with eWalk upon the associated practices related to MCREL's Balanced Leadership Framework. Respondents rated their level of agreement on a five-point Likert scale with 1 = Much less than before, 2 = Less than before, 3 = About the same as before, 4 = More than before, and 5 = Much more than before.

First, a one way analysis of variance (ANOVA) was used to determine if a significant relationship existed between the frequency of an administrator conducting walk-throughs with the use of eWalk upon the associated practices related to MCREL's Balanced Leadership framework. Two of the stem questions' overall difference between the means, derived from the associated practices related to MCREL's Balanced Leadership framework, resulted in a statistical difference between the levels of use determined by frequency in conducting walk-throughs with eWalk and visibility and input (see Table 24). A post hoc Tukey HSD test revealed that there was not a statistical difference between those levels of use regarding frequency of conducting classroom walk-throughs resulting in a Type I error

which is likely due to the small size of the samples within some of the sub-groups. The responses for the sixteen item stem questions related to the administrator's impact of using eWalk upon the associated practices with Balanced Leadership were averaged and resulted in an overall mean of 3.60 and a standard deviation .52 (see Table 24). The perception of classroom walk-throughs impacting an administrator to function as the lead learner did not report significant differences between the level of frequency of conducting walk-throughs F (4, 364) = 1.037, p = .388.

To test the null hypothesis for the research question, a second one way analysis of variance (ANOVA) was used to determine if a significant relationship existed between the years of experience an administrator had conducting walk-throughs with the use of eWalk and the associated practices related to MCREL's Balanced Leadership Framework. Only one of the Balanced Leadership stem questions resulted in a statistical difference between the level of years of experience using eWalk during walk-throughs and the difference in the mean perception of the associated behavior and practice pertaining to relationships. There was a statistical difference regarding based on the walk-through data between those having less than two years experience (M = 3.58, SD = .61) and those with more than three years experience (M = 3.72, SD = .61). The difference regarding the Balanced Leadership associated practice of relationships based on the walk-through data was statistically significant with a result of F (1, 382) = 4.152, p = .042. The responses for the sixteen item stem questions related to the administrators perception of walk-throughs for the associated practices related to MCREL's Balanced Leadership Framework were averaged and resulted in an overall mean of 3.59 and a standard deviation .52 (see Table 25). The perception of

classroom walk-throughs for the associated practices related to MCREL's Balanced Leadership framework did not result in significant differences between the level of use as determined by years of experience with eWalk $F(1, 385) = .880$, $p = .349$. Hence, the null hypothesis that there is no statistically significant relationship in the increased level of eWalk use and a higher perception by administrators' associated practices related to MCREL's Balanced Leadership Framework is not rejected.

Table 26

Descriptive Research of Practices related to Sharing the Walk-through Data Results

Item Descriptor	Response Options	Mean	Number of Participants	Percentage of Participants
Share Data with Individual Teacher (LL #6)		3.93 (##)		
	Strongly Disagree		4	1.0%
	Disagree		20	5.0%
	Neither Agree or Disagree		57	14.1%
	Agree		242	60.0%
	Strongly Agree		80	19.9%
	Total		403	100.0%
Sharing Aggregated Walk-through Data with Faculty (26)		1.34 (.48)		
	Yes		230	65.5%
	No		121	34.5%
	Total		351	100.0%
How the Aggregated Walk-through Data are Shared (27)				
	With the faculty as a whole		160	69.6%
	In smaller groups (departments or teacher teams)		151	65.6%
	The data are only shared with individuals		70	30.4%
How Often the Aggregated Walk-through Data are Shared (28)		2.86 (1.09)		
	Once every week or two		20	8.8%
	Once a month		71	31.4%
	Once a quarter or trimester (3 or 4 times a year)		77	34.1%
	Once a semester (2 times a year)		37	16.4%
	Once a year		21	9.3%
	Total		226	100.0%
Sharing Aggregated Walk-through Data with Students (30)				
	Yes		16	4.0%
	No		385	96.0%
	Total		401	100.0%
Sharing Aggregated Walk-through Data with Parents or Community Stakeholders (31)				
	Yes		58	14.3%
	No		347	85.7%
	Total		405	100.0%

Table 27

Formative Evaluation Related to Sharing Aggregate Classroom Walk-through Data

Item Descriptor	Response Options	N	M	Std. Dev.	df	f	p	95% Conf. Interval LB	UB
Most of my walk-throughs typically last 3 minutes or less.	Yes	228	2.56	1.28	1	.783	.377	2.39	2.73
	No	120	2.69	1.35	346			2.45	2.93
	Total	348	2.61	1.31	347			2.47	2.74
I collect data on the teacher's adjustments to students' learning needs during the lesson.	Yes	228	3.72	.92	1	1.702	.193	3.60	3.84
	No	120	3.59	.85	346			3.44	3.75
	Total	348	3.68	.90	347			3.58	3.77
I collect data on the teacher's decision-making during the lesson.	Yes	228	3.63	.91	1	1.532	.217	3.51	3.75
	No	120	3.50	.91	346			3.34	3.66
	Total	348	3.58	.91	347			3.49	3.68
I collect data on students' engagement during the lesson.	Yes	227	4.44	.62	1	4.637	.032	4.36	4.52
	No	120	4.28	.69	345			4.16	4.41
	Total	347	4.39	.65	346			4.32	4.45
I collect data on students' academic learning during the lesson.	Yes	228	4.17	.71	1	10.709	.001	4.08	4.26
	No	119	3.89	.84	345			3.74	4.04
	Total	347	4.07	.77	346			3.99	4.16
I am more likely to visit classrooms at unscheduled times throughout the day than I am with more formal teacher observations.	Yes	228	4.29	.75	1	.389	.533	4.19	4.39
	No	120	4.23	.88	346			4.07	4.39
	Total	348	4.27	.80	347			4.19	4.35
The data I collect is used for professional growth of the teacher.	Yes	227	4.20	.72	1	13.966	.000	4.11	4.30
	No	119	3.87	.93	344			3.70	4.03
	Total	346	4.09	.81	345			4.00	4.17
The data I collect helps me coach the teacher regarding instructional practices.	Yes	228	4.29	.61	1	13.014	.000	4.21	4.36
	No	119	4.00	.84	345			3.85	4.15
	Total	347	4.19	.71	346			4.11	4.26
Form Mean	Yes	227	3.91	.45	1	9.564	.002	3.85	3.97
	No	119	3.75	.51	344			3.65	3.84
	Total	346	3.86	.48	345			3.81	3.91

Table 28

Lead Learner Related to Sharing Aggregate Classroom Walk-through Data

Item Descriptor	Response Options	N	M	Std. Dev.	df	f	p	95% Conf. Interval LB	UB
The walk-through data I collect is used to inform the professional development needs of the teacher.	Yes	227	4.05	.73	1	21.065	.000	3.96	4.15
	No	120	3.65	.86	345			3.50	3.80
	Total	347	3.91	.80	346			3.83	4.00
Building-level professional development is based on the walk-through data that administrators collect.	Yes	227	3.79	.84	1	33.779	.000	3.68	3.90
	No	120	3.22	.94	345			3.05	3.39
	Total	347	3.59	.91	346			3.49	3.69
District-level professional development is based on the walk-through data that administrators collect.	Yes	225	3.27	.94	1	8.265	.004	3.14	3.39
	No	120	2.95	1.04	343			2.76	3.14
	Total	345	3.16	.98	344			3.05	3.26
The use of classroom walk-throughs helps teachers reflect on the effectiveness of their instruction.	Yes	225	4.04	.61	1	27.120	.000	3.96	4.12
	No	119	3.64	.79	342			3.50	3.78
	Total	344	3.90	.71	343			3.83	3.98
The use of classroom walk-throughs improves the academic learning of students in my school.	Yes	226	3.94	.74	1	18.466	.000	3.84	4.04
	No	120	3.58	.76	344			3.44	3.71
	Total	346	3.81	.77	345			3.73	3.89
I follow-up with teachers to discuss their professional growth and we use trend data from multiple walk-throughs to frame the conversation.	Yes	226	3.80	.82	1	24.093	.000	3.69	3.91
	No	116	3.32	.93	340			3.15	3.49
	Total	342	3.64	.89	341			3.54	3.73
Teachers find classroom walk-throughs to be valuable to them as professionals.	Yes	224	3.63	.78	1	12.604	.000	3.52	3.73
	No	120	3.33	.69	342			3.20	3.45
	Total	344	3.52	.76	343			3.44	3.60
The use of classroom walk-throughs increases my ability to be an instructional leader.	Yes	226	4.21	.65	1	3.725	.054	4.13	4.30
	No	119	4.07	.70	343			3.94	4.19
	Total	345	4.16	.67	344			4.09	4.23
The data collected helps me have better conversations with my teachers about instruction.	Yes	225	4.24	.60	1	4.148	.042	4.17	4.32
	No	118	4.09	.74	341			3.96	4.23
	Total	343	4.19	.66	342			4.12	4.26
The data collected allows our conversations about instruction to be more objective rather than subjective.	Yes	226	4.27	.61	1	9.218	.003	4.19	4.35
	No	119	4.04	.72	343			3.91	4.17
	Total	345	4.19	.66	344			4.12	4.26
More collegial relationships between teachers and administrators are fostered.	Yes	226	3.69	.80	1	4.546	.034	3.58	3.79
	No	119	3.50	.77	343			3.36	3.64
	Total	345	3.62	.79	344			3.54	3.70
I have a greater awareness of teaching and learning within my school.	Yes	223	4.23	.70	1	2.061	.152	4.14	4.33
	No	117	4.12	.68	338			3.99	4.24
	Total	340	4.19	.69	339			4.12	4.27
Lead Learner Mean	Yes	226	3.93	.50	1	30.444	.000	3.87	4.00
	No	119	3.61	.52	343			3.52	3.71
	Total	345	3.82	.53	344			3.77	3.88

Table 29

Balanced Leadership Related to Sharing Aggregate Classroom Walk-through Data

Item Descriptor	Response Options	N	M	Std. Dev.	df	f	p	95% Conf. Interval LB	UB
I am directly involved in helping	Yes	214	3.52	.63	1	6.521	.011	3.44	3.61
teachers design curricular activities	No	117	3.34	.60	329			3.23	3.45
for their classes.	Total	331	3.46	.62	330			3.39	3.53
I make systematic and frequent	Yes	216	3.85	.63	1	3.983	.047	3.77	3.94
visits to classrooms.	No	117	3.70	.71	331			3.57	3.83
	Total	333	3.80	.66	332			3.73	3.87
Individuals in my school who excel	Yes	216	3.49	.62	1	10.139	.002	3.41	3.57
are recognized and rewarded.	No	116	3.27	.58	330			3.16	3.37
	Total	332	3.41	.62	331			3.35	3.48
Teachers in my school have direct	Yes	215	3.50	.64	1	4.230	.040	3.42	3.59
input into all important decisions.	No	117	3.35	.65	330			3.23	3.47
	Total	332	3.45	.65	331			3.38	3.52
I am aware of the personal needs of	Yes	215	3.63	.59	1	.062	.804	3.55	3.71
the teachers in my school.	No	117	3.62	.63	330			3.50	3.73
	Total	332	3.63	.60	331			3.56	3.69
I try to inspire my teachers to	Yes	214	3.71	.65	1	4.258	.040	3.63	3.80
accomplish things that might seem	No	117	3.56	.71	329			3.43	3.69
beyond their grasp.	Total	331	3.66	.68	330			3.59	3.73
The teachers in my school are aware	Yes	213	3.76	.68	1	1.963	.162	3.67	3.85
of my beliefs regarding schools,	No	117	3.65	.70	328			3.52	3.78
teaching, and learning.	Total	330	3.72	.69	329			3.65	3.80
I continually monitor the	Yes	213	3.73	.65	1	2.927	.088	3.64	3.82
effectiveness of our curriculum.	No	116	3.60	.66	327			3.48	3.72
	Total	329	3.69	.66	328			3.62	3.76
I am directly involved in helping	Yes	214	3.73	.63	1	3.258	.072	3.65	3.82
teachers address instructional issues	No	117	3.60	.68	329			3.47	3.72
in their classrooms.	Total	331	3.69	.65	330			3.62	3.76
Seniority is not the primary method	Yes	214	3.41	.85	1	1.859	.174	3.29	3.52
of reward and advancement in my	No	117	3.27	.85	329			3.12	3.43
school.	Total	331	3.36	.85	330			3.27	3.45
I continually monitor the	Yes	216	3.79	.65	1	3.565	.060	3.70	3.88
effectiveness of the instructional	No	117	3.65	.66	331			3.53	3.77
practices used in our school.	Total	333	3.74	.66	332			3.67	3.81
I encourage people to express	Yes	215	3.66	.65	1	1.086	.298	3.57	3.75
opinions that are contrary to my	No	117	3.58	.69	330			3.46	3.71
own.	Total	332	3.63	.66	331			3.56	3.70
I am directly involved in helping	Yes	214	3.68	.62	1	1.535	.216	3.60	3.77
teachers address assessment issues	No	117	3.59	.70	329			3.46	3.72
in their classrooms.	Total	331	3.65	.65	330			3.58	3.72
I continually monitor the	Yes	215	3.69	.61	1	3.539	.061	3.61	3.77
effectiveness of the assessment	No	116	3.55	.66	329			3.43	3.67
practices used in my school.	Total	331	3.64	.63	330			3.57	3.71
I adapt my leadership style to the	Yes	214	3.72	.67	1	1.792	.182	3.63	3.81
specific needs of a given situation.	No	117	3.62	.69	329			3.49	3.74
	Total	331	3.68	.68	330			3.61	3.76
We systematically have discussions	Yes	213	3.60	.70	1	7.748	.006	3.50	3.69
in my school about current research	No	118	3.37	.70	329			3.24	3.50
and theory.	Total	331	3.52	.71	330			3.44	3.59
Balanced Leadership Mean	Yes	217	3.64	.51	1	4.910	.027	3.57	3.71
	No	117	3.51	.51	332			3.42	3.61
	Total	334	3.60	.52	333			3.54	3.65

Analysis of the Perception and Practices Related to the Sharing of Aggregate Classroom Walk-through Data

The practice of administrators sharing aggregate data gathered from classroom walk-throughs was not targeted as an original focus for this research. A further examination sought to not only indentify descriptive research regarding perceptions and practices, but to utilize inferential statistics to determine the significance. The practice of sharing aggregate data gathered from classroom walk-throughs offers the opportunity for administrators to examine trends in the data in order to focus upon improving teaching and learning practices aimed to improve student academic achievement in their schools (Cervone & Martinez-Miller, 2007; David, 2007; Ginsberg & Murphy, 2002; Granada & Vriesenga, 2008; Kachur, et al., 2009; Richardson, 2006). Sharing aggregate classroom walk-through data signifies a clear departure beyond merely conducting classroom walk-throughs with the use of eWalk. Therefore, analyzing the practice of sharing aggregate data provides an opportunity to examine how this divergent practice may impact administrators' perceptions and behaviors.

6. **Does the use of eWalk for the sharing of aggregated classroom walk-through data with the faculty have an impact administrative perceptions and behaviors regarding the purpose and intent of the walk-thorugh process? Specifically:**
    a. ***Does the use of eWalk for the sharing of aggregated classroom walk-through data have an impact upon administrative perceptions to utilize the walk-through process for formative evaluation?***

Null-Hypothesis: There is no statistically significant relationship between the use of eWalk for the sharing of aggregated classroom walk-through data and a higher perception by administrator to utilize the walk-through process as intended for formative evaluation.

b. Does the use of eWalk for the sharing of aggregated classroom walk-through data have an impact upon administrative perceptions of themselves as the lead learner of their faculty?

Null Hypothesis: There is no statistically significant relationship between the use of eWalk for the sharing of aggregated classroom walk-through data and a higher perception by administrators to self-report themselves as the lead learner of the faculty.

c. Does the use of eWalk for the sharing of aggregated classroom walk-through data have an impact upon changes in administrative perceptions and behaviors connected to the associated practices of the Balanced Leadership framework.

Null Hypothesis: There is no statistically significant relationship between the use of eWalk for the sharing of aggregated classroom walk-through data and a change in administrators' perceptions of their behaviors regarding the associated practices that are linked to the Balanced Leadership framework.

The practice of sharing data gathered from classroom walk-throughs was further examined to indentify descriptive research regarding perceptions and practices as well as utilizing inferential statistics to determine significance. Of the 403 respondents, 322 (79.9%)

indicated that they agreed or strongly agreed that they had followed-up with individual teachers to discuss their professional growth and used their trend data from walk-throughs (see Table 26). Of the 351 respondents, 230 (65.5%) self-reported that they had shared aggregated walk-through data with the faculty and 121 (34.5%) did not share the data with the faculty (see Table 26). Furthermore, of the 230 respondents that had shared aggregated walk-through data, 160 (69.6%) respondents indicated that they had done so with the faculty as a whole, 151 (65.6%) respondents indicated that they had shared the data in smaller groups (departments or teacher teams), and 70 (30.4%) respondents indicated that they shared the aggregated data only with individual teachers. Of the 401 respondents, only sixteen (4.0%) of the administrators indicated that they had shared this aggregated walk-through data with students. Of the 405 respondents there were 58 (14.3%) administrators who indicated that they had shared this aggregated walk-through data with parents or other community stakeholders.

Additionally, of the 226 respondents that participated in the practice of sharing data gathered from classroom walk-throughs, 20 (8.8%) respondents shared the aggregated walk-through data once every week or two, 71 (31.4%) respondents shared the data once a month, 77 (34.1%) respondents shared the data three or four times a year, 37 (16.4%) shared the data twice a year, and 21 (9.3%) had shared the data once a year (see Table 24).

To test the null hypothesis for the research questions, a one way analysis of variance (ANOVA) was used to determine if a significant relationship existed between the practice of sharing aggregated classroom walk-through data and conducting walk-throughs for the purpose of formative evaluation, the administrator's self perceptions as the lead learner, and

the impact upon the administrators' practices associated with the Balanced Leadership framework. All three areas of an administrator's practices were found to be statistically significant with regard to the practice of sharing the aggregated data gathered from classroom walk-throughs with the faculty.

As illustrated in Table 27, four of the eight individual stem questions were highly significant regarding the role of the administrator sharing the aggregate classroom walk-through data with the practices associated with conducting walk-throughs for the purpose of formative evaluation. Regarding the practice of conducting walk-throughs for the purpose of formative evaluation, there was an overall statistical difference between the 227 respondents that do share aggregate data from walk-throughs (M = 3.91, SD = .45) and the 119 who do not share aggregate data from walk-throughs (M = 3.75, SD = .51) (see Table 25). The difference in the formative evaluation mean for those who share aggregated classroom walk-through data was statistically significant with a result of F (1, 344) = 9.56, p = .002. Hence, the null hypothesis that there is no statistically significant relationship in the practice of sharing aggregated walk-through data with the faculty as related to the practice of conducting walk-throughs for the purpose of formative evaluation is rejected.

As illustrated in Table 28, ten of the twelve individual stem questions were highly significant regarding the role of the administrator in sharing the aggregate classroom walk-through data with the practices associated with functioning as the lead learner of the faculty. Regarding the practice of conducting walk-throughs and the effect upon the perception of one's self as the lead learner, there was an overall statistical difference between the 226 respondents that do share aggregate data from walk-throughs (M = 3.93, SD = .50) and of the

119 who do not share aggregate data from walk-throughs (M = 3.61, SD = .52) (see Table 25). The difference in the lead learner mean for those who share aggregated classroom walk-through data was statistically significant with a result of F (1, 344) = 30.44, p = .001. A p-value of $p < 0.05$ was utilized for determining statistical significance for all of the data analyses conducted. Hence, the null hypothesis that there is no statistically significant relationship in the practice of sharing aggregated walk-through data with the faculty as related to the practice of functioning as the lead learner of the faculty is rejected.

As illustrated in Table 29, six of the sixteen individual stem questions were highly significant regarding the role of the administrator in sharing the aggregate classroom walk-through data with the practices associated with increased changes in associated practices linked to the Balanced Leadership framework. Regarding the practice of conducting walk-throughs and the effect upon the perception of practices associated with the Balanced Leadership framework, there was an overall statistical difference between the 217 respondents that do share aggregate data from walk-throughs (M = 3.64, SD = .51) and of the 117 who do not share aggregate data from walk-throughs (M = 3.51, SD = .51) (see Table 25). The difference in the Balanced Leadership mean for those who share aggregated classroom walk-through data was statistically significant with a result of F (1, 332) = 4.91, p = .027. A p-value of $p < 0.05$ was utilized for determining statistical significance for all of the data analyses conducted. Hence, the null hypothesis that there is no statistically significant relationship in the practice of sharing aggregated walk-through data with the faculty as related to the practices associated with the Balanced Leadership framework is rejected.

Table 30

Impact of Sharing Walk-through Data to Function as a Professional Learning Community

Response Options	Mean (SD)	Number of Participants (Percentage of Participants)					
		SD	D	N	A	SA	T
The faculty has a sense of ownership for the walk-through data.	3.47 (.77)	0	26	78	108	12	224
Sharing walk-through data facilitates open dialogue about instructional practices occurring in our classrooms.	4.01 (.53)	0	3	21	172	30	226
Collaboratively teachers use walk-through data to work to systemically analyze the impact of curricular initiatives.	3.44 (.82)	1	31	76	104	14	226
Walk-through data help us identify areas for professional growth in teaching and learning.	3.97 (.60)	1	4	25	164	30	224
Professional Learning Community Mean	3.73 (.52)						

Table 31

Functioning as a Professional Learning Community by Frequency of Walk-throughs

Item Descriptor	Response Options	N	Mean	Std. Dev.	df	f	p	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
The faculty has a sense of ownership for the walk-through data.	Total	214	3.49	.77	4 209 213	.907	.461	3.39	3.59
Sharing walk-through data facilitates open dialogue about instructional practices occurring in our classrooms.	Total	214	4.01	.54	4 209 213	1.256	.289	3.94	4.08
Collectively teachers use walk-through data to systemically analyze the impact of curricular initiatives.	Total	215	3.46	.82	4 210 214	.961	.430	3.35	3.57
Walk-through data help us identify areas for professional growth in teaching and learning.	Total	213	3.97	.59	4 208 212	1.417	.229	3.89	4.05
PLCfunction	Total	215	3.73	.53	4 210 214	1.157	.331	3.66	3.80

Table 32

Functioning as a Professional Learning Community by Years of Experience with eWalk

Item Descriptor	Response Options	N	Mean	Std. Dev.	df	f	p	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
The faculty has a sense of ownership for the walk-through data.	0 - 2 years	145	3.49	.76	1	.187	.666	3.37	3.61
	3 or more years	79	3.44	.80	222			3.26	3.62
	Total	224	3.47	.77	223			3.37	3.57
Sharing walk-through data facilitates open dialogue about instructional practices occurring in our classrooms.	0 - 2 years	146	4.02	.53	1	.078	.781	3.93	4.11
	3 or more years	80	4.00	.53	224			3.88	4.12
	Total	226	4.01	.53	225			3.94	4.08
Collectively teachers use walk-through data to systemically analyze the impact of curricular initiatives.	0 - 2 years	146	3.47	.83	1	.468	.494	3.33	3.60
	3 or more years	80	3.39	.80	224			3.21	3.57
	Total	226	3.44	.82	225			3.33	3.55
Walk-through data help us identify areas for professional growth in teaching and learning.	0 - 2 years	144	4.06	.62	1	9.313	.003	3.96	4.16
	3 or more years	80	3.81	.53	222			3.69	3.93
	Total	224	3.97	.60	223			3.89	4.05
PLC Function	0 - 2 years	147	3.76	.54	1	1.823	.178	3.67	3.85
	3 or more years	80	3.66	.49	225			3.55	3.77
	Total	227	3.73	.52	226			3.66	3.79

Functioning as a Professional Learning Community

The practice of sharing classroom walk-through data with the faculty was further examined to indentify descriptive research regarding the ability of the faculty to function as a professional learning community. To test the null hypothesis for the research questions descriptive data was compiled and inferential statistics were utilized. The survey questionnaire had participants rate their level of agreement with four statements related to practices and the perceptions of the one's faculty to function as a professional learning community. Respondents rated their level of agreement on a five-point Likert scale with 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree or Disagree, 4 = Agree, and 5 = Strongly Agree.

Of the 224 respondents, 120 (53.6%) self-reported that they agreed or strongly agreed that the faculty has a sense of ownership for the walk-through data (see Table 30). Of the 226 respondents, 202 (89.4%) self-reported that they agreed or strongly agreed that sharing walk-through data facilitates open dialogue about instructional practices occurring in their classrooms (see Table 30). Of the 226 respondents, 118 (52.2%) self-reported that collaboratively teachers use walk-through data to work to systemically analyze the impact of curricular initiatives (see Table 30). Of the 224 respondents, 194 (86.6%) self-reported that the walk-through data help us identify areas for professional growth in teaching and learning (see Table 30). Furthermore, the respondents' individual four stem questions related to their faculty's functioning as a professional learning community were averaged to create an overall mean for the 221 valid respondents resulting in an overall mean of 3.73 with a standard deviation of 0.52.

First, a one way analysis of variance (ANOVA) was used to determine if a significant relationship existed between the frequency of an administrator conducting a walk-through with the use of eWalk and the practices and the perceptions of the faculty to function as a professional learning community. None of the professional learning community stem questions resulted in any statistical difference between the level of frequency in conducting walk-throughs with eWalk and the difference the mean perceptions for the associated practices (see Table 31). The responses for the twelve item stem questions related to the administrators perception of walk-throughs for the purpose of functioning as a lead learner were averaged and resulted in an overall mean of 3.73 and a standard deviation .52 (see Table 31). The perception of the faculty to function as a professional learning community did not report statistically significant differences between the level of frequency of conducting classroom walk-throughs $F(4, 210) = .1.157$, $p = .331$.

To test the null hypothesis for the research questions, a second one way analysis of variance (ANOVA) was used to determine if a significant relationship existed between the years of experience an administrator had conducting walk-throughs with the use of eWalk and the practices and the perceptions of the faculty to function as a professional learning community. Only one of the professional learning community stem questions resulted in a statistical difference between the level of years of experience using eWalk during walk-throughs and the difference in the mean perceptions for the associated practices. There was a statistical difference regarding walk-through data to help identify areas for professional growth in teaching and learning between those having less than two years experience (M = 4.06, SD = .62) and those with more than three years experience (M = 3.81, SD = .53). The

difference regarding district-level professional development being based on the walk-through data was statistically significant with a result of F (1, 222) = 9.313, p = .003. The responses for the four questions related to the administrator's perception of walk-throughs for the purpose of functioning as a professional learning community were averaged and resulted in an overall mean of 3.73 and a standard deviation of .52 (see Table 32). The perception of classroom walk-throughs data to be used for functioning as a professional learning community did not result in significant differences between the level of use as determined by years of experience with eWalk F (1,222) = 1.823, p = .178. Hence, the null hypothesis that there is no statistically significant relationship in the increased level of eWalk use and a higher perception by evaluators to utilize the walk-through data for functioning as the lead learner of a professional learning community is not rejected.

Summary

In summary, this chapter presented the analyses of data and concurrent findings for this study. The purpose of this quantitative research study sought to gather the descriptive and inferential statistics of administrative practices and perceptions in conducting classroom walk-throughs in conjunction with the use of eWalk and the impact upon an administrator's perception and behavior regarding the purpose and intent of the walk-through process. The data was analyzed using SPSS software to calculate descriptive research as well as using a p-value of less than .05 to determine statistical significance from analyses of variance.

The study examined the descriptive statistics regarding the respondent's demographic information and training experiences associated with conducting classroom walk-throughs with eWalk. The leadership practices were examined with administrators

using the eWalk software product in the states of Georgia, Iowa, and Kentucky. Approximately 80 percent of the respondents have received formal training in conducting classroom walk-throughs from a variety of theoretical models, with 87 percent of those indicating that the training was beneficial. Furthermore, 73% of respondents have had training in how to utilize eWalk, with 70 percent indicating that the eWalk training was helpful for using the software product.

Additionally, 82 percent of respondents are required to conduct classroom walk-throughs; with 70 percent of those required also required to utilize eWalk. Yet, less than fourteen percent of respondents conduct ten or more classroom walk-throughs a week with the use of eWalk. Also, about 70 percent of administrator respondents have two or less years of experience with using the eWalk software. Slightly over half of the administrators have increased their frequency of conducting walk-throughs as a result of using eWalk. Moreover, with the use of eWalk 80 percent have increased the quantity of the data collected and 75 percent have increased the quality of the data collected.

The level of eWalk use was defined by the frequency of conducting classroom walk-throughs with the use of eWalk or the years of experience using eWalk. There were no overall statistically significant results between the level of eWalk use in relationship to the impact upon a) the perception and behavior regarding classroom walk-throughs for formative evaluation, b) the perception of themselves as the lead learner, or c) the change in associated practices linked to the Balanced Leadership framework.

Respondents reported that of the 54 percent of administrators who conduct joint classroom walk-throughs, two-thirds have conducted these with other administrators from in

their building or within their district and a quarter have involved teachers in the process. It was found that there is a statistically significant relationship between conducting joint classroom walk-throughs and the perception of self as the lead learner of the school and the impact upon practices associated with the Balanced Leadership framework. Over 95 percent of those conducting joint classroom walk-throughs found it to be a beneficial process; with high ratings for the perceived benefits of ensuring cross-observer reliability, offering a different perspective of what was observed, and the opportunity to share experiences and knowledge from other settings.

Nearly two-thirds of respondents reported that they shared aggregate classroom data gathered with eWalk, with approximately two-thirds of those respondents sharing the data with the faculty as a whole and in small groups. Additionally, nearly 40 percent of the respondents shared this data at least once a month and another 50 percent shared this data two to four times a year. The practice of sharing aggregate classroom walk-through data with the faculty was linked with statistical significance to an increase in practices associated with conducing classroom walk-throughs with the use of eWalk for a) the purpose of formative evaluation, b) functioning as the lead learner of the faculty, and c) the associated practices of MCREL's Balanced Leadership responsibilities.

The respondents that shared aggregate classroom walk-through data rated their faculty on its ability to function as a professional learning community. The results indicated that nearly 90 percent agreed that sharing walk-through data facilitated open dialogue about instructional practices occurring in their classrooms. Additionally, nearly 87 percent of these

administrators reported that the walk-through data helped the faculty indentify areas for professional growth in teaching and in learning.

The final chapter 1) views the results in light of the literature, 2) outlines the implications for practitioners, 3) illustrates the potential impact for school improvement efforts, 4) delineates recommendations for purpose and function to inform policy and practices, 5) outlines recommendations for future research, and 6) illustrates how this study will further the research and literature regarding conducting classroom walk-throughs.

CHAPTER 5. DISCUSSION

This final chapter reviews the results, provides some analysis, and discusses the findings in light of the relevant literature. The implications for practitioners are outlined, including illustrating the potential impact for school improvement efforts, delineating recommendations to inform policy and practices. The limitations and delimitations of this study expounded upon providing context to the applicability and generalization of the research findings. The study concludes with some recommendations for future research, and discusses how this study furthers the research literature regarding classroom walk-throughs.

Purpose

The purpose of this study was to examine building-level principals' practices and the relationships of their use of eWalk while conducting classroom walk-throughs. Specifically, the intents of the study were to: (a) gather general demographic information; (b) answer general questions regarding information on demographics and frequency of classroom walk-through behavior; (c) descriptive research regarding the perception of the purpose of the function and intent of the administrator as he/she conducts classroom walk-throughs; (d) reveal perceptions of their behavior to function as the lead learner, conduct joint classroom walk-throughs, sharing of the walk-through data results; and (e) explore the associated practices tied to the framework of Balanced Leadership and those behaviors linked to conducting walk-throughs. Examining how administrators use eWalk during their walk-throughs sheds light on how this practice fits into transforming the supervisory practices and impacting leadership responsibilities.

In the current climate of accountability within PK-12 education, a systematic method is necessary to collect and analyze the data gathered from instructional observations. Indeed, the emphasis of attributes sought in an administrator has changed over the past few decades as it has shifted away from managerial characteristics to the attributes of instructional leadership. Yet it is necessary in the daily operation of a school for administrators to balance the wearing of three hats: the manager, the instructional leader, and the lead learner. Utilizing eWalk in the walk-through process allows for technology to assist in gathering data to inform how individuals and the whole organization can work to improve both teaching and learning. As lead learners, administrators need to utilize the supervisory practice of classroom walk-throughs to gather data in order to share the aggregated data with the faculty to determine professional development needs and to extend their ability to function as a professional learning community.

Many school districts have begun implementing the use of eWalk in conjunction with the classroom walk-through process. Prior to this study, no formal large scale study of how administrators have utilized eWalk or any other electronic evaluation technologies and tool have been conducted; therefore, as there was no previous baseline data indicating how participants have used eWalk, there are no means to compare the difference in data trends that might exist. Furthermore, the use of eWalk in many districts is in its infant stages, so any definitive judgments may appear premature. This study served to gather initial data on the use of eWalk and further the research and literature regarding conducting classroom walk-throughs.

Findings

The study expounded upon the descriptive and inferential statistics pertaining to the five research questions as well as other relevant research findings. The leadership practices were examined among building-level administrators who use the eWalk software product in the states of Georgia, Iowa, and Kentucky.

1. ***Who are the administrators currently using eWalk and what are their general demographic characteristics and training experiences associated with classroom walk-throughs?***

The study examined respondents' demographic information and training experiences associated with conducting classroom walk-throughs with eWalk. A slight imbalance existed among respondents; 58.8% females and 40.1% of the respondents were between 35 – 44 years old. Nearly half of the respondents were from Georgia (46.7%) and nearly half of all respondents served as administrators at the elementary level (46.1%). The majority of respondents indicated that they were from public school districts (92.9%), just over half served in rural communities (53.0%), and two-thirds of the administrators were in buildings with student enrollments between 300 – 1000 students. Additionally, nearly two-thirds of the respondents indicated that their buildings had met the criteria set forth for Adequate Yearly Progress. The survey reported that two-thirds of administrators reported that they had been serving in their present administrative position for five or fewer years, and the majority of administrators indicated they had five or fewer total years as an administrator (41.2%). The majority of the respondents (62.0%) indicated that they had obtained a degree above a

Master's degree. For this study, the analysis conducted did not indicate that any variation of these demographic features impacted the results of the dependent measures.

Further data analysis focused upon the professional development and training experiences of administrators. Approximately 80 percent of the respondents had received formal training in conducting classroom walk-throughs from a variety of theoretical models, with 87 percent of those indicating that the training was beneficial. Furthermore, 73 percent of respondents had training in how to utilize eWalk, with 70 percent indicating that the eWalk training was helpful for using the software product. Yet, it is important to note that nearly one in five administrators conducting classroom walk-throughs had never received formal training under any theoretical model and just over one in four administrators is currently using eWalk without having had formal training in how to effectively use the software. It was clear with 70.4 percent of respondents that had received formal training indicating that they had found the eWalk training to be beneficial despite nearly half of the users desiring further training.

2. ***What administrative practices and behaviors are associated with the use of eWalk and how do they impact the processes surrounding classroom walk-throughs?***

Overall, 82.4 percent of respondents were required to conduct classroom walk-throughs. Additionally, 70.4 percent of those required respondents were mandated to utilize eWalk. Nearly half of the responses indicated that Apple computer devices were utilized to record the data with the eWalk software product. Over three-fourths of the respondents reported conducting an average of ten or fewer total classroom walk-throughs. Moreover, less than fourteen percent of respondents conduct ten or more classroom walk-throughs a

week with the use of eWalk. Also, about twice the number (70.5%) of administrator respondents have two or fewer years of experience using the eWalk software. Despite the low frequency of walk-throughs and the extent of inexperienced users, slightly over half (53.8%) of the administrators have increased their frequency of conducting walk-throughs as a result of using eWalk. Moreover, with the use of eWalk four of five administrators (79.3%) believed they have increased the quantity of the data collected and 75 percent have increased the quality of the data collected.

Conclusion 1: The level of eWalk use does not have an impact upon administrative perceptions to utilize the walk-through process as intended for formative evaluation.

The level of eWalk use was defined by the frequency of conducting classroom walk-throughs using eWalk or by the years of experience using eWalk. Overall, the administrators did not report any statistically significant difference between the level of eWalk use in relation to the impact upon the perception and behavior regarding classroom walk-throughs for formative evaluation. The level of eWalk use was not determined statistically significant for either the frequency of conducting classroom walk-throughs using eWalk or the number of years of experience using eWalk. Therefore, just because an administrator conducts a higher number of classroom walk-throughs using eWalk does not mean that his intention for this process is for teaching and coaching the teacher (formative evaluation) rather than the managerial practice of supervision (summative evaluation). Also, there was no evidence to suggest that having a greater number of years of experience using eWalk as part of the

classroom walk-through process increased the propensity to use walk-throughs for the purposes of formative evaluation rather than summative evaluation.

Conclusion 2: The level of eWalk use does not have an impact upon administrative perceptions of themselves as the lead learner of the faculty.

The level of eWalk use was defined by the frequency of conducting classroom walk-throughs using eWalk or by the years of experience using eWalk. Overall, the administrators did not report any statistically significant difference between the level of eWalk use in relation to the impact upon the perception of themselves as the lead learner. Neither the number of eWalk classroom walk-throughs nor the years of eWalk experience resulted in a statistically significant change in how administrators perceived their roles as lead learners. Therefore, just because an administrator conducts a higher number of classroom walk-throughs with the use of eWalk does not mean they are more likely to perceive their function as the lead learner of the school. Also, there was no evidence to suggest that having a greater number of years of experience using eWalk as part of the classroom walk-through process increases the propensity to self-report themselves as functioning in capacities to serve as the lead learner of the faculty.

Additionally, of the 54 percent of administrators who reported conducting joint classroom walk-throughs, 66 percent of the respondents have conducted these with other administrators from within their building or district; 25 percent have involved teachers in the process. Additionally, 95 percent of those conducting joint classroom walk-throughs found it to be a beneficial process; with high ratings for the perceived benefits of ensuring cross-observer reliability, offering a different perspective of what was observed, and the

opportunity to share experiences and knowledge from other settings. Furthermore, it was found that there is a statistically significant relationship between conducting joint classroom walk-throughs and the perception of self as the lead learner of the school and the impact upon practices associated with the Balanced Leadership framework. Therefore, those administrators engaging in the practice of conducting joint walk-throughs reported more confidence regarding their abilities to act in the capacity of lead learner. Likewise, those administrators engaging in the practice of conducting joint walk-throughs also reported more behavioral changes regarding the associated practices linked to the Balanced Leadership framework.

Conclusion 3: The level of eWalk use does not have an impact upon changes in administrative behavior connected to the associated practices that are linked to the Balanced Leadership framework.

The level of eWalk use was defined by the frequency of conducting classroom walk-throughs with the use of eWalk or by the years of experience using eWalk. Overall, the administrators did not report any statistically significant difference between the level of eWalk use in relation to the impact upon the perceptions and the changes in the associated practices linked to the Balanced Leadership framework. The level of eWalk use was not determined statistically significant for either the frequency of conducting classroom walk-throughs with the use of eWalk or the number of years of experience using eWalk. Therefore, just because an administrator conducted a higher number of classroom walk-throughs using eWalk does not mean there was a change in the associated practices linked to the Balanced Leadership framework. Also, no evidence suggested that having a greater number of years of

experience using eWalk as part of the classroom walk-through process impacted the perceptions and changes in the associated practices linked to the Balanced Leadership framework.

Conclusion 4: The administrators' practice of sharing aggregated classroom walk-through data with the faculty does impact the administrative perceptions and behaviors regarding the purpose and intent of the walk-through process.

Although it was not an original focus in the development of the study, through reflection and data analysis it was determined necessary to more closely examine the administrators' practice of sharing aggregate classroom walk-through data. Moreover, the focus centered on the impact of sharing the aggregate classroom walk-through data with the faculty as related to the purpose, practices, and impact upon the administrators' behavior and perceptions. Virtually four of every five administrators (79.9%) indicated that they had used eWalk trend data gathered during classroom walk-throughs to follow-up and dialogue with individual teachers regarding their professional growth. Nearly two-thirds of respondents reported that they shared aggregate classroom data gathered with eWalk; approximately two-thirds of those respondents sharing the data with the faculty as a whole (69.6%) and in small groups (65.6%). Additionally, nearly 40 percent of the respondents shared this data at least once a month and another 50 percent shared this data two to four times a year. The respondents that shared aggregate classroom walk-through data rated their faculty on its ability to function as a professional learning community. The results indicated that nearly 90 percent agreed that sharing walk-through data facilitated open dialogue about instructional practices occurring in their classrooms. Additionally, nearly 87 percent of these

administrators reported that the walk-through data helped the faculty identify areas for professional growth in teaching and learning. The practice of sharing aggregate classroom walk-through data with the faculty was linked with statistical significance to an increase in practices associated with conducing classroom walk-throughs with the use of eWalk for a) utilizing the process for the purpose of formative evaluation, b) functioning as the lead learner of the faculty, and c) implementing the associated practices of MCREL's Balanced Leadership responsibilities.

Conclusion 4a: The use of eWalk for the sharing of aggregated classroom walk-through data does have an impact upon administrative perceptions to utilize the walk-through process for formative evaluation.

Overall, the administrators did report a statistically significant difference between the practice of using eWalk for sharing aggregated classroom walk-through data and a higher perception by an administrator's perceptions and behaviors regarding utilizing the walk-through process for formative evaluation rather than for summative evaluation. Therefore, when an administrator conducted classroom walk-throughs using eWalk with the intention of sharing the aggregate data with the faculty, they were more likely to view the process as intended for improving teaching and learning by coaching the teacher (formative evaluation), rather than a mere managerial practice of supervision (summative evaluation). Moreover, there was statistically significant evidence that administrators who shared aggregate data were more likely to focus data collection on student engagement and the learning process as well as using data to coach and identify professional development needs of individual teachers.

Conclusion 4b: The use of eWalk for the sharing of aggregated classroom walk-through data does have an impact upon administrative perceptions of themselves as the lead learner of their faculty.

Overall, the administrators did report a statistically significant difference between the practice of using eWalk for sharing aggregated classroom walk-through data and the impact upon an administrator's perceptions and behaviors about functioning as the lead learner. Therefore, when an administrator conducted classroom walk-throughs using eWalk with the intention for sharing the gathered data with the faculty, they were more likely to perceive themselves as lead learners of the school as well as act in a manner consistent with practices focusing upon improving the teaching and learning of the entire school. Specifically, there was statistically significant evidence as indicated by those administrators who shared aggregate data; to be more likely to use the walk-through data to inform professional development needs of individual teachers, building-level professional development plans, and district-level professional development plans. Moreover, there were statistically significant results that the use of sharing aggregate walk-through data are connected to the ability for administrators to use the process and data collected to spur teachers to engage in reflective conversations about improving instruction. Those administrators sharing and using aggregate classroom walk-through data indicated that teachers are finding a benefit in the process as professionals and it has fostered greater collegial relationships among teachers and administration. Furthermore, administrators believe that the use of classroom walk-throughs improved the academic learning of students in their schools.

Conclusion 4c: The use of eWalk for the sharing of aggregated classroom walk-through data does have an impact upon changes in administrative perceptions and behaviors connected to the associated practices of the Balanced Leadership framework.

Overall, the administrators did report a statistically significant difference between the practice of using eWalk for sharing aggregated classroom walk-through data and the impact upon an administrator's behaviors regarding the associated practices linked to the Balanced Leadership framework. Therefore, when an administrator conducted classroom walk-throughs using eWalk with the intent of sharing the gathered data with the faculty, they were more likely to have changed their behaviors regarding the associated practices linked to the Balanced Leadership framework. The six Balanced Leadership associated practices that are related to the sharing of aggregate classroom walk-through data included: involvement in curriculum, instruction, assessment, visibility, contingent rewards, input, optimizer, and intellectual stimulation.

Discussion and Findings Related to the Literature

In this section, the study's findings are discussed in light of the relevant literature connected to eWalk and the practices regarding conducting classroom walk-throughs. Specifically, the findings of how administrators use eWalk during classroom walk-throughs are discussed through examining the literature related to the areas of training models, frequency, formative evaluation, feedback, lead learner, balanced leadership, professional development and learning communities, and continuous school improvement.

Training Models. Respondents indicated that one in five (20%) administrators had no formal training and one in four had not been formally trained to use eWalk (see Table 9). Therefore, to maximize the effect of administrators' use of eWalk, it would be necessary to encourage formal training for administrators. The act of conducting classroom walk-throughs came from the managerial practices originating from the research known as Management by Wandering Around (MBWA) (Peters & Waterman, 1982). The classroom walk-through practice has evolved from a managerial focus to that of a learning leader who utilizes these informal classroom observations to center attention on teaching practices and student learning (Downey, et al., 2004; Downey, et al., 2010; Kachur, et al., 2009; Zepeda, 2008). No matter the walk-through models embraced, it is important to ensure that time has been allocated to training in order to ensure proper professional development to ensure fidelity to the spirit and intent (Downey, et al., 2004; Kachur, et al., 2009; Larson, 2007; Skretta, 2007; Zepeda, 2008). The training of the evaluator, should emphasize active learning and in-situ training focused on providing effective feedback and engage the faculty (Heneman & Milanowski, 2004; Milanowski & Heneman, 2001). Not only must an evaluator train his mind to effectively focus upon the teaching-learning process during walk-throughs, but a tool is needed to collect data, compile, categorize, summarize, and examine trends (Granada & Vriesenga, 2008; Kachur, et al., 2009). As school leaders focus their attention to monitor and collect the walk-through data, it is necessary to train the individuals as well as provide a mechanism to systematically gather and analyze the data for the purpose of continuous improvement (Bernhardt, 1998; Lezotte & McKee, 2002). Merging the use of eWalk with the classroom walk-through process offers the ability to transform supervision and evaluation

into a systematic practice aimed at assisting in the teacher evaluation process by utilizing a data-driven digital tool.

Frequency. The impact of merging eWalk into the practice of classroom walk-throughs as part of supervision and evaluation resulted in less than 14 percent of administrators conducting more than ten classroom walk-throughs conducted per week with eWalk (see Table 14). Additionally, 75% of administrators reported that they conducted ten or fewer total classroom walk-throughs each week (see Table 14). These results indicated there must be a greater emphasis placed upon training evaluators on how to conduct effective observations using eWalk. Along with the increased emphasis upon instructional leadership and lead learner behavior, utilizing constructive feedback that emphasizes reflective conversations necessitates that administrators increase their frequency of conducting classroom walk-throughs in order to have enough data and observational experiences to engage with teachers (Cotton, 2003; Downey, et al., 2004; Downey, et al., 2010; DuFour & Marzano, 2009; Kachur, et al., 2009; Leithwood & Riehl, 2003; Marzano, et al., 2005). As administrators embrace eWalk, it has enabled administrators to increase the frequency (53.8%) as well as improve the quantity (79.3%) and quality (75.0%) of data through the quick collection and analysis of large amounts of observation data (see Table 17) (David, 2007; Granada & Vriesenga, 2008; Kachur, et al., 2009). The effective administrators who commit to the use of eWalk in order to compile the data for both aggregate and disaggregate trends in the school's instruction and student learning process will serve not only as the evaluator, but as an instructional coach and lead learner (Granada & Vriesenga, 2008; Larson, 2007).

Formative Evaluation. Formative evaluation ($p = .002$), data collection, and the sharing of the aggregate data with the faculty must be systematic as well as linked with relevant research in order to lay the framework for conversations that examine professional development needs and areas of strength (see Table 27). The utilization of eWalk for formative evaluation purposes can lay the framework to ensure that vital data-driven conversations may occur. School leaders can use eWalk to improve teachers' performances for professional growth ($p = .001$), through using the classroom walk-through data, specific feedback to coach the teacher ($p = .001$), and analysis of aggregate data trends ($p = .001$) to improve student academic achievement in their schools (see Table 27 and Table 28) (Blase & Blase, 2000; Cervone & Martinez-Miller, 2007; David, 2007; Granada & Vriesenga, 2008; Kachur, et al., 2009; Rossi, 2007; Skretta, 2007; Stronge, et al., 2008). Although effective conversations can take place between the evaluator and the classroom teacher without the assistance of eWalk, these conversations are often limited to what was seen at a specific time in the classroom. With the use of eWalk an evaluator may compile these short "snapshots" to easily note aggregate data trends regarding an individual teacher ($p = .001$) and/or the larger faculty; moreover, from the details the larger picture begins to emerge creating a powerful mosaic (see Table 28) (Cervone & Martinez-Miller, 2007; Ginsberg & Murphy, 2002; Kachur, et al., 2009; Larson, 2007; Richardson, 2006). In compiling and sharing the aggregate data the administrator is likely to look with a different perspective aimed to transform teaching and learning practices for the whole school (86.6% agree) (see Table 30). Nearly 80 percent of respondents indicated that they used trend data gathered with eWalk to follow-up with individual teachers to discuss their professional growth (see Table 26).

Administrators must work to ensure that feedback is given and provides the opportunity for two-way communication (90% agree) with teachers to engage in their own analytical and reflective process regarding on-going observations (p = .001) (see Table 28 and Table 30) (Downey, et al., 2004; Granada & Vriesenga, 2008; Skretta, 2007). By engaging in an on-going and systematic process for collecting data through observations and walk-throughs, it will be clear to the evaluator which teachers need assistance and the areas that need instructional support (Cervone & Martinez-Miller, 2007; David, 2007; Granada & Vriesenga, 2008; Kachur, et al., 2009).

Feedback. Formative evaluation and feedback based upon the gathered aggregated data should be systematically shared with individuals and the faculty as a whole. This will lay the framework for conversations that examine professional development needs and areas of strength (p = .001); building on these conversations (p = .042) will impact the growth in student achievement (p = .001) (see Table 28). It is the administrators follow-up and reflective conversations (p = .001) derived from the review data (p = .003) with teachers that can improve teaching practices (p = .001) and the students' learning processes (p = .001) (see Table 28) (Downey, et al., 2004; Heneman & Milanowski, 2004). The administrator has dual roles within the teacher evaluation system: for personnel accountability (summative) and developmental coaching with feedback for instructional improvement targeting professional growth (formative) (p = .002) (see Table 27) (C. Danielson, 2010; C. Danielson & McGreal, 2000; Milanowski, 2005; Stronge, 2006). As a result, greater attention to adult learning theories and the role of building trust (p = .034) between the evaluator and teacher is crucial (see Table 28) (Downey, et al., 2004). Reflective conversations are likely to break

down without the objective data (p = .003) and specific feedback regarding what was observed and trends versus mere “drive-through” observations (see Table 28) (Cervone & Martinez-Miller, 2007; Downey, et al., 2004; Downey, et al., 2010; Skretta, 2007; Using the classroom walk-through as an instructional leadership strategy," 2007, February). As data from classroom walk-throughs is compiled, the “snapshots” create a larger picture enabling the leader and faculty to analyze individuals or larger groups for strengths and areas for improvement (Cervone & Martinez-Miller, 2007; Ginsberg & Murphy, 2002; Kachur, et al., 2009; Larson, 2007; Pitler & Goodwin, 2008; Richardson, 2006). In focusing in on formative evaluation and data trends, the larger purpose of classroom walk-throughs as professional development is targeted at improving teaching and learning.

Lead Learner. In working to move a school forward to improve student academic achievement, administrators must not merely fulfill the managerial roles, but they must also fulfill instructional leadership capacities and become the lead learner (Cotton, 2003; DuFour & Marzano, 2009; Leithwood & Riehl, 2003). The on-going practice of monitoring and evaluating classroom practices coupled with the sharing of the aggregate data with the faculty may ensure that systemic efforts are being implemented across a school (p = .001) to raise the level of academic achievement for all students (p = .001) (see Table 28). Blasé and Blasé (2000) revealed that the two key elements for impacting student achievement are for principals to talk with teachers to promote reflection (p = .001, p = .001, p = .042, and p = .003) and for building principals to promote growth opportunities for professional development (p = .001 and p = .001) (see Table 28). Recently, there has been a movement for classroom walk-throughs aimed at improving student academic achievement by focusing on

evidence of teaching and learning (p = .032 and p = .001) (see Table 27); furthermore, walk-throughs using eWalk (EETT) ensure that data are collected to allow for reflective conversations with individual teachers (p = .001) as well as to foster data-driven Professional Learning Communities (86.6% agree) (see Table 28 and Table 30) (Cervone & Martinez-Miller, 2007; Granada & Vriesenga, 2008; Kachur, et al., 2009; Larson, 2007; Skretta, 2007; Using the classroom walk-through as an instructional leadership strategy," 2007, February).

In sharing the aggregate classroom walk-through data, administrators can engage teachers in sharing the responsibility for instructional leadership; specifically, through using the continuous improvement processes by allowing for collaboration and empowering the faculty to use the data from eWalk to collectively discuss practices (89.4% agree) aimed toward increase student academic achievement (86.6%) (see Table 30) (Cotton, 2003; Elmore, 2004; Kachur, et al., 2009). Administrators must analyze trends in their school to inform the necessary professional development opportunities (p = .001, p = .001, and p = .004), as well as provide opportunities for personnel to collaborate and work together to improve academic opportunities for the students of the school regarding the areas of need for teaching, learning, and assessment (86.6% agree) (see Table 28 and Table 30). This walk-through behavior, data collection, and frame of mind must become systemic, intentional, and purposeful in order to: (a) ensure proper implementation of initiatives; and (b) give the appropriate importance to ensure one leads the learning and professional development needs necessary for faculty to come together to move the district forward to improve student academic achievement for all (Cervone & Martinez-Miller, 2007; Granada & Vriesenga, 2008; Kachur, et al., 2009; Larson, 2007).

Balanced Leadership. Marzano et al. (2005) argued that the single most important influence on a student's academic achievement is the quality of the classroom teacher, followed by the leadership of the principal. In a MCREL meta-analysis of school administrator leadership, the strength of the relationship twenty-one specific leadership responsibilities and associated behaviors were assessed to judge the quantitative effect upon student achievement (Marzano, et al., 2005). Specifically, ten Balanced Leadership responsibilities are associated with the practice of conducting classroom walk-throughs: visibility, relationships, intellectual stimulation, involvement in curriculum, instruction, and assessment, monitor/evaluate, ideals and beliefs, optimizer, input, and flexibility (Pitler & Goodwin, 2008). In turn, as an administrator commits to the walk-through process and the practice of the sharing aggregate classroom walk-through data with the faculty, it can serve as the means to impact classroom instruction and the principal will ensure circumstances to assist in bolstering student achievement.

Active involvement in conducting walk-throughs ensures increased visibility, frequency of interactions, and the ability to maintain order while allowing the opportunity for instructional leadership to be manifested in professional exchanges stemming from daily interactions. As school leaders move away from mere managers to lead learners of a professional learning community, they must possess knowledge of curriculum, instruction, and assessment, so they may fuse this knowledge with the practice of conducting classroom walk-throughs in conjunction with eWalk. Moreover, sharing and analyzing the aggregate classroom walk-through data can assist in creating a unified vision for the school, working to understand the individual and collective needs of the teachers, encourage the needed

collaboration for teachers to build their skill-set, set-up professional learning communities, and define a plan of action for improving and sustaining academic growth (DuFour & Marzano, 2009). As administrators utilize eWalk for sharing aggregate classroom walk-through data it can assist in their ability to function as the lead learner by strengthening their ability to demonstrate associated Balanced Leadership responsibilities ($p = .027$) (see Table 29). Specifically, the six Balanced Leadership associated practices that were related to sharing of aggregate classroom walk-through data included: involvement in curriculum, instruction, and assessment ($p = .011$), visibility ($p = .047$), contingent rewards ($p = .002$), input ($p = .040$), optimizer ($p = .040$, and intellectual stimulation ($p = .006$) (see Table 29).

Professional development & learning communities. The best professional development practices manifested in effective Professional Learning Communities (PLC) contain the analysis of data by focusing on teaching and learning through a collective effort to use the results for on-going continuous school improvement (DuFour & Eaker, 1998; Guskey, 2000; Shannon & Bylsma, 2004). Nearly two-thirds of the respondents using eWalk indicated that they shared the aggregate data with faculty in various sizes of groups and frequency throughout the year. Additionally, there was an overwhelming response for the practice of sharing walk-through data to impact the open dialogue regarding instructional practices (90%) and helping the faculty to identify areas for professional growth in teaching and learning (87%) (see Table 30). This further reinforced the notion that the professional conversations of faculty regarding the aggregate walk-through data allow for the PLCs to systematically discuss teaching and learning needs aimed toward raising student academic achievement (Shannon & Bylsma, 2004). In working as a lead learner to share the aggregate

classroom walk-through data, the administrator strives to support individual teachers as well as to create the circumstances for collaboration in order to improve the skill set and knowledge necessary to improve student achievement (Elmore, 2000). Administrators must focus the collection of classroom walk-through data and report both individual (79.9% agree) and the aggregate data (65.5% agree) in a manner that allows for PLCs to systematically reflect upon teaching and learning practices with the aim to improve student academic achievement (86.6% agree) (see Table 26 and Table 30) (Bernhardt, 1998; Elmore, 2000; Shannon & Bylsma, 2004).

Leaders in school districts that are showing student academic improvement utilize classroom walk-throughs to monitor the day-to-day work of teachers, implementation of curriculum, and professional development initiatives (Shannon & Bylsma, 2004; Walberg, 2007; Zavadsky, 2006). As educational leaders focus their attention on monitoring and collecting the walk-through data, eWalk provides a mechanism to systematically gather and analyze the data for continuous improvement of teaching and learning practices (Bernhardt, 1998; Lezotte & McKee, 2002; Walberg, 2007). As the lead learner, administrators must understand which data are to be collected and arranged in a meaningful way as to allow interpretation and conclusions to be made for influencing appropriate decision making (Bernhardt, 1998). The power and faculty ownership (53.6% agree) of using the data from eWalk classroom walk-throughs is found in sharing the aggregate data to be analyzed to assess strengths, set goals, and discuss how collaborative efforts may be used to improve student learning (86.6% agree) (see Table 30).

Continuous School Improvement. The accountability agenda in education, highlighted by NCLB, necessitates that administrators take responsibility for poor results and work to focus on enhancing the instruction of the teachers as a means to improve student performance. Thus, evaluators need to sharpen their own instructional leadership skills (DuFour, 2002; Leithwood & Riehl, 2003; Ruebling, et al., 2004). Instructional leadership is where the administrator works to create the conditions that foster work toward improving student academic achievement (Elmore, 2000). The data gathered from classroom walk-throughs help frame discussions ($p = .001$, $p = .001$, $p = .042$ $p = .003$) with faculty to assist school leaders to function as better instructional leaders for their schools (see Table 28) (Rossi, 2007). Furthermore, it is not enough to merely conduct classroom walk-throughs and collect data; rather, as instructional leaders the data must be the catalyst for school improvement ($p = .001$) and individual professional growth ($p = .001$) (see Table 28) (Blase & Blase, 2000; Cervone & Martinez-Miller, 2007; Larson, 2007; Rossi, 2007). The ability to utilize eWalk to categorize, summarize, and examine trends in classroom walk-through data has increased the frequency (53.8% agree) as well as improve the quantity (79.3% agree) and quality (75.0% agree) of data; and in turn the administrator can now engage the administrative team, the entire faculty, small groups and individual teachers in purposeful conversations (see Table 17) (Cervone & Martinez-Miller, 2007; David, 2007; Granada & Vriesenga, 2008; Kachur, et al., 2009; Skretta, 2007, 2008). Anchoring monitoring and evaluation practices in the ongoing practice of classroom walk-throughs allows for utilizing a systematic process to collect data through observations that, in turn, may align systemic efforts to be implemented throughout a school to promote academic achievement for all

students (Cervone & Martinez-Miller, 2007). Emphasizing the practice of conducting classroom walk-throughs in the on-going practice of monitoring and evaluation with the use of eWalk can ensure that systemic efforts are being implemented across a school to ensure academic achievement for all students.

Implications and Recommendations

The No Child Left Behind legislation mandates not only that American schools provide an education for students but also holds schools accountable for ensuring each and every student becomes proficient. Despite school administrators having to balance their time and energy between managerial, instructional leadership, and lead learner roles and responsibilities, it is evident that the foremost charge resting upon school leaders is to improve student academic achievement (see Figure 1). In order to tackle the task of improving teaching and learning, utilizing eWalk during classroom walk-throughs provides an opportunity to support teachers, increase visibility, grow in the leading of the learning, and share data to create a foundation for a professional learning community. This research sought to further explore the relationship between leadership and the practice of conducting classroom walk-throughs with the use of eWalk with the aim to improve teaching and learning across a school.

General Implications. The research did not find evidence that the practice of increasing the level of eWalk use, as defined by years of experience and/or frequency of conducting walk-throughs, leads to an increase in the perception to use the process as intended for formative evaluation ($p = .381$ and $p = .564$) or increased perception as the lead learner ($p = 4.92$ and $p = .350$) (see Table 18, Table 19, Table 20, and Table 21). Moreover,

the increased practice of using eWalk did not result in changes of behavior related to the Balanced Leadership responsibilities ($p = .388$ and $p = .349$) (see Table 24 and Table 25). However, the practice of having conducted classroom walk-throughs with the explicit intention to gather data with the use of eWalk and share this with the whole faculty can yield changes in an administrator's leadership behavior. Specifically, it was found that these administrators aiming to share the aggregate data from classroom walk-throughs is related to increased perceptions of the walk-through process for the purpose of formative evaluation ($p = .002$), increased perception as the lead learner of the school ($p = .001$), and changes in the behaviors associated with the Balanced Leadership responsibilities ($p = .027$) (see Table 27, Table 28, and Table 29). The practice of intentionally using eWalk to gather data from walk-throughs can in fact have a profound impact on the ability of an administrator to improve teaching and learning by developing and supporting teachers on an individual and a collective level.

General Demographics. There should be some concern of bias linked to the reliability and objectivity of the administrators who are using eWalk during observations; with nearly 20 percent of respondents indicating that they have not been formally trained under any theoretical model for conducting classroom walk-throughs (see Table 9) (Brandt, Mathers, Oliva, Brown-Sims, & Hess, 2007; Mathers, et al., 2008; Mujis, 2006). Even with initial training, it is important for administrators to engage in continued opportunities for practice as 53.3 percent indicated the need for more eWalk training (see Table 11). Only 54.7 percent of respondents indicated that they currently engage in the opportunity to recalibrate their judgments with other administrators by conducting joint walk-throughs

while debriefing and reflecting on the meaning of the observations (see Table 22). Additionally, administrators have not fully taken advantage of the opportunities to debrief and reflect on the meaning of observations as 6.0 percent of respondents have not reflected at all with individual teachers and 34.5 percent have not maximized the power of the reflection process by sharing the aggregate data with the faculty (see Table 26) (C. Danielson, 2010). Currently, only 14% of administrators responded that they conducted ten or more classroom walk-throughs a week with the use of eWalk (see Table 14). Based upon how few classroom walk-throughs are regularly being recorded, it would be advised to create opportunities for effective training for administrators regarding how to utilize eWalk. Therefore, a commitment must be made to ensure frequent observations take place where data can be compared across the district buildings and grade-levels.

Skeptics of using eWalk in conjunction with short two- to three-minute classroom walk-throughs do not believe that such an observation will provide administrators and teachers with any valuable information on how to improve teaching and learning. It must be understood that despite the short observation, there is a trade off of increased frequency of visits to the classroom resulting in a process that can engage teachers in reflective conversations about trends in teaching (Downey, et al., 2004; Kachur, et al., 2009).

In order to keep consistency in perspective across a district, with 20% of administrators not having any formal classroom walk-through training, it would be advised to have all of the evaluators trained in a similar model such as the "Three Minute Walkthrough" procedures. Downey and Associates have produced *Three-Minute Classroom Walk-through: A Multimedia Kit for Professional Development*. It would be advised to have this training

material used for those administrators that have not been previously trained under the Downey walk-through model. Additionally, a district can purchase of a copy of *The Three-Minute Classroom Walk-Through: Changing School Supervisory Practice One Teacher at Time* for any administrators that do not possess a copy. Lastly, the follow-up book *Advancing the Three-Minute Walk-through: Mastering Reflective Practice* (Downey, Steffy, Poston, & English, 2009) may be of use to many of these administrators. Discussions and follow-up may occur monthly during district-wide administrative team meetings and monthly building-level curriculum meetings. For those not able to attend formal workshop training, webinars and other forms of on-line professional development could be utilized for on-going training and support.

Frequency. In the era of increased accountability and an increased pressure on student achievement, there must be a shift to focus on the effect of the administrator's behavior and practices upon classroom teaching. Many of the implications of effectively utilizing eWalk and the sharing of the aggregate data depends upon frequently conducting classroom walk-throughs in order to access on-going practices with a large enough amount of data. Less than fourteen percent of administrators conduct more than ten classroom walk-throughs each week with the use of eWalk. In light of the emphasis and role of instructional leadership emphasized for today's school administrators to be out and about in classrooms, this is an alarming statistic. An overwhelming amount of research conducted on effective administrative practices indicates that not enough time is spent formally and informally observing classrooms (Cervone & Martinez-Miller, 2007; C. Danielson & McGreal, 2000;

Frase & Hetzel, 2002; Ginsberg & Murphy, 2002; Prothroe, 2009; Richardson, Oct./Nov. 2001; Zepeda, 2008).

The time commitment to embracing the use of eWalk along with conducting classroom walk-throughs is very reasonable given the priority for administrators to improve student academic achievement. Instructional leadership has risen to the forefront of responsibilities for administrators (Cotton, 2003; Elmore, 2000; Marzano, et al., 2005). Therefore, administrators must commit to actively embracing this leadership activity as a means to improve teaching and learning, while collecting data to lead the school forward. Despite administrators having to balance the managerial roles associated with office work, employee supervision, student supervision, student discipline, and other meetings with various stakeholders, it is possible to purposefully include and even increase the amount of time dedicated to instructional leadership activities such as conducting classroom walk-throughs.

Hypothetically, an administrator may have approximately thirty teachers that one is directly responsible for their supervision and evaluation. In total, it might take ten minutes to conduct the classroom walk-through, record the data, move throughout the building, analyze the data, and provide prompts with reflective feedback for each teacher. Each principal should conduct between 10 – 15 walk-throughs per week with specific attention to the month's curricular focus. With this rate of frequency each administrator will visit each teacher they evaluate at least twice a month. This investment of fifteen walk-throughs every week would result in visiting each teacher every two weeks for a mere investment of two and a half hours a week or 30 minutes a day (6.25% of a 40 hour work week) to dramatically

prioritize improving teaching and learning throughout the school's organization. Most administrators, despite having very busy schedules and demands on the position, could find thirty minutes a day to delegate other tasks, push paperwork to out-of-school hours, or prioritize responsibilities to fulfill this commitment (even if it is found in five to ten minute increments).

Formative Evaluation. Building-level administrators are charged with the ultimate task to improve each student's academic achievement ($p = .001$) through using formative evaluation ($p = .002$) to impact every teacher's daily practices in the classroom ($p = .001$, $p = .001$) (see Table 27 and Table 28). Unless leaders are actively in classrooms monitoring the instruction they will be unable to ensure that effective practices are being implemented, be able to reinforce the good things happening, and keep aware of the areas of concern for professional improvement.

Marzano (2003) has reported on the effect size of the quality of the classroom teacher to be the greatest impact upon a student's academic growth. Furthermore, in the era of accountability it is necessary for administrators to ensure consistent implementation of effective pedagogy, continued support, and facilitate learning of the teacher. Despite administrators not having the depth of content for each subject matter, walk-throughs that utilize templates for collecting data of "look-fors" related to general teaching and learning behaviors, that reflect best practices, allow for the information to be used for the whole school to focus upon improvement of instruction (Elmore, 2000; Marzano, et al., 2005; Pitler & Goodwin, 2008). The use of eWalk fits with the recent national efforts that have pushed for teacher evaluation and support that are linked to improvement of student learning

(Education, 2009). Also, it is uncommon for teachers to be provided with a great deal of on-going and pointed feedback as to how they can improve their practice (C. Danielson, 2010). Therefore, eWalk's ability to collect and track data provides a wonderful opportunity for an administrator to identify and support a teacher's individual professional development needs ($p = .001$) (see Table 28).

Marzano (2005) has illustrated the impact of effective and ineffective teachers upon student achievement where the gap between students with an effective and those with an ineffective teacher continues to grow each year. Therefore, it is imperative that educational leaders' foremost concern should be to systematically embrace a tool such as eWalk with the classroom walk-through process to coach ($p = .001$) and improve each teacher's practices ($p = .001$) (see Table 27). Improve the teaching, and in turn the learning process ($p = .001$) will be strengthened to improve student academic achievement. An on-going and sustained commitment to serve as the instructional leader allows for the administrator to serve not only as a teacher's coach ($p = .001$), but as their primary support in improving their teaching while breaking down the isolation found throughout the profession (see Table 27) (Kachur, et al., 2009).

Feedback. Using eWalk allows the principal a structured process to gather data to engage the teacher in reflective dialogue ($p = .001$, $p = .001$, $p = .042$, $p = .003$) regarding improving an individual's teaching practices ($p = .001$) and the learning process ($p = .001$) occurring within one's classroom (see Table 27 and Table 28). At some point the administrator identifies a focus from trends in data ($p = .001$) and engages the teacher with feedback (see Table 28). The reflective conversations involved in debriefing individual trend

data collected during walk-throughs provides the opportunity to embed a systematic process and provide detailed feedback when engaging teachers in professional dialogue. The professional dialogue based upon reflective questions can be the cornerstone to improving an individual teacher's instructional practices (C. Danielson, 2010; Downey, et al., 2010; Kachur, et al., 2009). Moreover, principals must especially seek to utilize the dialogue with experienced teachers to focus upon areas for growth as well as areas of strength to develop capacity within the entire faculty through either peer coaching or lead the whole faculty in s professional development. The building-level leadership by an administrator to provide coaching and formative feedback to teachers is essential to impact their instructional practices and learning environments (Fullan, 2002).

The ability to aggregate and examine trend data on individual teachers and/or departments allows for not only indentifying learning needs, but it can help identify faculty members to lead an initiative. Of the respondents, nearly 80 percent agreed or strongly agreed that they used trend data to follow-up and frame the discussion with teachers to discuss their professional growth; still, this resulted in nearly one of every five administrators not fully utilizing the power of this data as part of the formative evaluation process (see Table 26). Ultimately the purpose of engaging teachers in professional dialogue is to allow for reflection upon their own instructional practices which leads to practitioners growth as an educator (C. Danielson, 2010; Downey, et al., 2004; Downey, et al., 2010). It is clear that as administrators work to share the aggregate classroom walk-through data with the faculty, there is a greater tendency for teachers to see value ($p = .001$) and frame the reflective conversations ($p = .001$, $p = .001$, $p = .042$, $p = .003$) in the classroom walk-through data (see

Table 28). There is a need to systemically, intentionally, and purposefully focus adult conversations back to the teachers to allow for reflection enabling them to assess their instructional practices. These conversations are the opportunity to highlight the art of teaching with questions leading to conversation on how to merge the science of best research-based practices into one's professional skill-set.

Lead Learner. Administrators must see themselves as the lead learner ($p = .001$) of the school and shoulder the responsibility for the teaching and learning practices throughout the school (see Table 28). Therefore, principals must engage in instructional leadership practices including a commitment to conducting classroom walk-throughs, aggregating the data, engaging with faculty members in reflective dialogue, fostering a vision of effective teaching and learning, and facilitating professional learning communities (Cervone & Martinez-Miller, 2007; C. Danielson, 2010; DuFour, 2002; DuFour & Marzano, 2009; Kachur, et al., 2009; Marzano, et al., 2005). The active involvement in monitoring teaching and learning, through classroom walk-throughs and the sharing of aggregate data collected with eWalk, allows for the principal to have a much better perspective on the progress in regards to individual ($p = .001$), school ($p = .001$), and district ($p = .004$) professional development plans, creating a culture of reflective practitioners ($p = .001$, $p = .001$, $p = .042$, $p = .003$) focused upon increasing student academic achievement ($p = .001$), and allows the fostering of open-dialogue to strengthen collegial relationships ($p = .034$) throughout the faculty (see Table 28).

The building principal must keep a focus upon the collective needs for professional development and focus these efforts and initiatives toward the specific goals for improving

student achievement. As an administrator harnesses the power of sharing the aggregate data with the faculty, the practice of conducting classroom walk-throughs with the use of eWalk to gather data offers a tremendous opportunity to create a systemic process that can inform individual teacher ($p = .001$), building-level ($p = .001$), and district-level ($p = .004$) professional development plans are likely to be based upon and informed by the classroom walk-through data (see Table 28). If the district is not using a source of data for its improvement plans and to inform professional development needs, it is unlikely for the building level administrators and faculty engage in the data-driven reflection (Wahlstrom, Seashore-Louis, Leithwood, & Anderson, 2010). Essential to improvement in student academic achievement is the connection between a faculty's sense of collective efficacy and the ability to use data to positively impact achievement data. Administrators who actively gather walk-through data can effectively monitor the implementation of professional development initiatives. Likewise the data can be used for informing future professional development needs. Moreover, the ability to disaggregate the walk-through data allows for the administrator to identify not only specific strategies of interest, but one can examine if there are trends among departments and/or teachers with common areas for growth. It has been found that unless administrators fulfilled instructional leadership practices and behaviors, all of the efforts focused upon various initiatives related to improving student learning targets were not successful (Wahlstrom, et al., 2010).

Joint Walk-Throughs. The practice of conducting joint walk-throughs was significantly related to an administrator functioning as the lead learner ($p = .041$) and demonstrating associated Balanced Leadership responsibilities ($p = .045$) (see Table 23).

Conducting joint walk-throughs, especially with other administrators, allows administrators the opportunity to coach one another by working on developing consistency (74.0%), discussing best practices of teaching and learning (81.2%), and reaping the benefits of the rich discussions leading to collaboration of ideas and perspectives related to instructional practices (62.3%) (see Table 22) (Kachur, et al., 2009). It is advised that each principal conduct joint walk-throughs with central office personnel once a month (learning walk). Secondly, it is recommended that each principal conduct joint walk-throughs with another peer principal twice a month (learning walk). These practices will allow administrators in the district to compare observations and data in order to recalibrate the data collection and walk-through practices (quality and reliability).

Balanced Leadership. The six associated Balanced Leadership practices that were related to sharing of aggregate classroom walk-through data included: involvement in curriculum, instruction, and assessment, visibility, contingent rewards, input, optimizer, and intellectual stimulation (see Table 29). The use of gathering walk-through data with eWalk and the practice of sharing the aggregate data has increased administrators involvement in curriculum, instruction, and assessment by improving an administrator's ability to assist teachers in designing curricular activities ($p = .011$), thereby impacting student academic achievement through changing teaching and learning practices. By conducting classroom walk-throughs, a principal has the ability to be visible ($p = .047$) throughout the building which allows for accessibility for teachers and students as well as allows for the administrator to steer the vision and positively affect the culture and climate of a building through the emphasis upon teaching and learning. An administrator's visibility within

classrooms should result in little to no disruption of the learning environment if the administrator has committed to frequent observations. As administrators are purposefully observing the practices occurring in each classroom, they have the ability to exhibit contingent rewards ($p = .002$) reinforcing the successful practices occurring within classrooms. High visibility of an administrator is the ideas that teachers can increase the degree of input ($p = .040$) teachers have upon important decisions and engage in the process of influencing the direction of the school. Serving as an optimizer ($p = .040$), the building administrator has the ability to use observational data to help inspire teachers to reach beyond their perceived capabilities and personalize the change process to implement new initiatives. As administrators focus upon improving teaching and learning, the practice of sharing aggregate walk-through data produced statistically significant results regarding the practices associated with intellectual stimulation ($p = .006$). As the administrator engages the faculty to systematically have discussions in their school about current research and theory, the stage is set to change the conversations among adults to focus upon improving teaching and learning (86.6%) (see Table 30). This practice of spurring dialogue (89.4%) among faculty members is a critical element to implementing a professional learning community (see Table 30) (Blase & Blase, 2000; DuFour & Eaker, 1998; Pitler & Goodwin, 2008).

Sharing Aggregate Data with Faculty. The research is clear that the single most important impact on student academic achievement is the quality of the teacher (Marzano, et al., 2005). Yet, the accountability for this improvement ultimately rests upon the administrator of the building. Therefore, as the principal works to improve the quality of the teaching-learning process it must be realized that this process is best done not in isolation,

but through partnerships with teachers rooted in professional learning communities that aim at sharing (89.4%) and creating ownership (54.6%) in the adult learning to improve the student learning experiences (see Table 30) (Pitler & Goodwin, 2008).

Building administrators must create systematic opportunities for teachers to analyze curricular initiatives (52.2%) and collaborate around improving teaching and learning practices (86.6%) (see Table 30). It has not been a typical process for the aggregate data gathered from either formal or informal observations to be used for setting improvement goals or monitoring progress (Wahlstrom, et al., 2010). Administrators must establish the purpose for teaching and learning as well as how the data gathered from classroom walk-throughs will be used for school improvement (Cervone & Martinez-Miller, 2007; Ginsberg & Murphy, 2002; Granada & Vriesenga, 2008; Pitler & Goodwin, 2008; Wahlstrom, et al., 2010). Further, the administrator must use the data analysis process as part of a professional learning community practices during the time provided for collaborative learning and professional dialogue.

Administrators must analyze trends in their school to inform the necessary professional development opportunities ($p = .001$), as well as provide opportunities for personnel to collaborate and work together to improve academic opportunities for the students of the school (see Table 28). Without using electronic software as part of the walk-throughs it will continue to be a subjective process that is based upon isolated snap-shots and not rooted in the aspects of the larger picture. Now with a wealth of data, the administrator may collaborate with the whole faculty in order to indicate the areas of professional growth needed in order to continue to advance student academic achievement for all. The utilization

of eWalk throughout the classroom walk-through process offers a unique opportunity by examining the aggregate data and sharing this information with the faculty to create a powerful focus upon teaching and learning (86.6%); specifically, the faculty may identify what strategies could be implemented or strengthened throughout the school in order to have the greatest impact on student academic achievement (see Table 30).

Due to the sharing of the aggregate classroom walk-through data with the faculty, there were highly significant results upon administrators' practices and behaviors regarding classroom walk-throughs being utilized for formative evaluation ($p = .002$), the increased self-perception as the lead learner ($p = .001$), and change in the behaviors associated with the practices that are linked to the Balanced Leadership framework ($p = .027$) (see Table 27, Table 28, and Table 29). Through the purposeful act of sharing the aggregate data gathered from principals use of eWalk, a school can change the content and tone of conversations to center on teaching and learning (89.4%) (see Table 30). The practice of sharing and discussing this data with the whole faculty can be a powerful tool for celebrating the successful practices occurring, sharing best practices, and building a collective understanding of effective instruction. Furthermore, harnessing the power of aggregating the data into graphs and tables allows for discerning instructional trends as well as identification of areas for growth. In identifying areas for growth, the power of aggregated data enables administrators, building leadership teams, and the whole faculty to objectively identify professional development needs and own the decision likely leading to increased support of an initiative.

The data collected from classroom walk-throughs must not be examined in isolation, but should be analyzed within the framework of a professional learning community. The aggregate data compiles each snapshot of teaching and learning to begin creating a mosaic of the teaching and learning practices throughout the school resulting in a powerful feedback for stakeholders (Granada & Vriesenga, 2008; Larson, 2007; Pitler & Goodwin, 2008; Richardson, 2006). In turn, the stakeholders and the faculty will be provided a wealth of information to begin conducting professional conversations that reflect upon improvement of instructional practices and creating the learning circumstances that are most conducive to improvement of student academic achievement.

The role and emphasis of attributes sought in an administrator have changed over the past few decades; roles have shifted away from the managerial characteristics to the attributes of instructional leadership. Utilizing electronic evaluation technologies and tools (EETT) in the walk-through process must not merely allow for school leaders to simply become managers with technology in their hands; rather, a principal must become engaged as the lead learner (David, 2007). Administrators need to conduct frequent formal and informal observations in the course of effective walk-through procedures. In the era of accountability, effective instructional leadership that ensures academic achievement for all students entails that expectations be clear, instruction be monitored using walk-through observations, and that professional development opportunities be tailored to meet each teacher's individual needs (Cervone & Martinez-Miller, 2007; Downey, et al., 2004; Johnston, 2001; Ovando & Ramirez, 2007). The professional dialogue emerging from the classroom walk-through data that will frame the feedback and promote sharing must focus and reflect on instructional

practices and set the stage for the next steps for the professional learning community. Continuous monitoring of data by the professional learning community will enable principals to reflect on how to support the faculty and individuals of the PLC as well as how to make adjustments to implement instructional initiatives (52.2%) (see Table 30) (DuFour, et al., 2004; Using the classroom walk-through as an instructional leadership strategy, 2007, February).

Continuous School Improvement. The use of the data gathered with eWalk provides the tool necessary for school leaders to foster a professional learning community among the faculty that is centered in the elements for continuous school improvement. In these schools the walk-through process will not be seen as something that is "done to teachers" or a managerial act, but rather be viewed as a transformational process focused upon teaching and learning (86.6%) that is embedded in a culture of continuous improvement (see Table 30) (Cervone & Martinez-Miller, 2007; David, 2007; Granada & Vriesenga, 2008; Kachur, et al., 2009; Larson, 2007; Richardson, 2006).

It is imperative that continuous school improvement plans not focus solely upon standardized assessment data, but include the examination of actual teaching and learning practices occurring within the classrooms (Cervone & Martinez-Miller, 2007; Granada & Vriesenga, 2008; Kachur, et al., 2009; Larson, 2007). The data gathered with eWalk provides a wonderful opportunity for individual professional development plans ($p = .001$), building-level ($p = .001$) school improvement plans, and district-level ($p = .004$) professional development plans to be rooted in the trend data of the teaching and learning practices (see Table 28). (Cervone & Martinez-Miller, 2007). As part of the continuous improvement plan,

the use of the classroom walk-through process must be rooted with a purposeful focus, frequently conduct walk-throughs and collect the data, analyze the data, reflect on the data, indentify a plan of action, carry out the action plan, and evaluate the action plan (Cervone & Martinez-Miller, 2007).

The data-driven professional conversations must be reflective and are best served when they lead to action planning for implementation of practice as well as discussion on how to continue the monitoring and evaluation of the next step. The process of examining data should never result in being satisfied with the status quo. Rather, tracking and analyzing data allows for the opportunity for individuals and whole faculty groups to periodically reexamine progress and develop SMART goals (Specific, Measurable, Achievable, Results oriented, with a set Timeline) with the aim of continuous improvement.

The professional learning community structure offers the ability for the whole faculty to take ownership (53.6%) of the teaching and learning throughout the entire building as well as creating job-embedded professional development opportunities centered on collaborative conversations (89.4%) aimed at continuous improvement of implementing best practices (see Table 30) (DuFour, et al., 2004; DuFour & Eaker, 1998). Working to have the whole faculty engaging in meaningful and reflective conversations regarding teaching and learning will foster the ability to function as a professional learning community (Cervone & Martinez-Miller, 2007; DuFour & Eaker, 1998; Guskey, 2000; Larson, 2007). As the faculty focuses upon common intended targets for teaching and learning, it is likely to support professional dialogue and growth through sharing expertise and experiences with each other. In turn and in line with the spirit of Professional Learning Communities, conversations with faculty

members may center on the necessary professional development needed to move the school forward regarding needs for student academic achievement (Cervone & Martinez-Miller, 2007; Kachur, et al., 2009).

Overarching Implications. The software technology imbedded in the eWalk tool that is used to collect the data simplifies the ability to use reports to aggregate and disaggregate the data from walk-throughs (David, 2007; Granada & Vriesenga, 2008; Kachur, et al., 2009; Larson, 2007). As administrators embrace eWalk, it has enabled administrators to increase the frequency (53.8%) as well as improve the quantity (79.3%) and quality (75.0%) of data through the quick collection and analysis of large amounts of observation data (see Table 17) (David, 2007; Granada & Vriesenga, 2008; Kachur, et al., 2009). Without the assistance of eWalk, few administrators would take the necessary time to collect, aggregate the data, and assist the faculty in identifying patterns in the practices of teaching and learning (Larson, 2007). Administrators must be able to speak with confidence to stakeholders that in fact best practices related to teaching and learning are being consistently implemented with fidelity. Now armed with the data and a process that may be rooted in strong professional learning communities the administrator is poised to emerge not only as an instructional leader ($p = .002$) with greater knowledge and practices, but as the lead learner ($p = .001$) of an institution focused on improving teaching and learning for the benefit of academic achievement for each and every student (see Table 27 and Table 28).

Through conducting classroom walk-throughs administrators will have the ability to keep abreast on the teaching and learning practices occurring within the building (Cervone & Martinez-Miller, 2007; David, 2007; Ginsberg & Murphy, 2002; Granada & Vriesenga,

2008; Kachur, et al., 2009; Larson, 2007). In committing to actively gather data with eWalk, the administrator benefits in the ability to identify and disaggregate strengths and weaknesses in instruction, shift the focus to engaging the faculty in reflective conversation ($p = .001$, $p = .001$, $p = .042$, $p = .003$) and dialogue about teaching and learning (86.6%), indicate individual professional development needs ($p = .001$), understand the actual implementation of professional development initiatives, and utilize the data for the school ($p = .001$) and district ($p = .004$) improvement plans (see Table 28 and Table 30).

The incorporation of eWalk can be the systemic guiding force that a) solidifies the process for collecting data from walk-throughs, b) provides easy to use reports to aid in analysis, c) allows for the administrator to review data trends prior to prompting feedback to spur reflective dialogue, d) assist in creating a professional learning community revolving around discussion of teaching and learning, and e) the data gathered can be incorporated into continuous improvement plans for both the school and district.

Formative evaluation and data collection must be systematic as well as be organized effectively where it links to relevant research. This will lay the framework for conversations to examine professional development needs and areas of strength which will impact growth in student achievement. Attention to adult learning theories and the role of building trust between the evaluator and teacher will be crucial. As administrators move away from mere managers to lead learners of a professional learning community, they indicate the need for further professional development in conducting classroom walk-throughs with the use of eWalk. The effective administrator will be one who can engage not only as an evaluator, but as the coach and lead learner equipped with the knowledge and skill set to be the

instructional leader necessary to transition student learning into the 21st Century. Through the utilization of electronic technology in the teacher evaluation process, the administrators will be using a tool that objectifies the process of data collection. The follow-up conversations ensure not only that the scientific elements of teaching are present, but the spirit and art of education is being honored in the reflective questions posed. In focusing on formative evaluation and data, the evaluation process will not be seen as merely a hoop-jumping process. Instead, teachers will look at the connections to professional development and personnel decisions and see not only a sense of accountability but a larger purpose (Mathers, Oliva, and Laine, 2008). Therefore, evaluators must set clear expectations (summative), goals (formative), and purpose (lead learner) to ensure that walk-throughs measure and focus on meaningful conversations concerning the realities of the practice in the classrooms.

With the electronic summative report options administrators can not only conduct walk-throughs, but also utilize the technology for implementation studies by comparing individuals to the department, across department analysis, or even across district (Media-x, 2008). This practice is the significant as it calls for administrators and faculty members to objectively take a critical look at data to influence practice and needed professional development. As the lead learner, an administrator can now engage the administrative team, the whole faculty, small groups and individual teachers in purposeful conversations about the practices occurring in the classrooms and the necessary professional development needed to move the school forward regarding needs for student academic achievement.

Conducting classroom walk-throughs with the aid of eWalk has allowed administrators to transform a previously managerial act of supervision and evaluation into a systematic process for gathering data to assist in coaching individual teachers ($p = .002$), leading the learning of the whole faculty ($p = .001$), and improving professional practices and associated Balanced Leadership behaviors ($p = .027$) connected to the practice of conducting classroom walk-throughs (see Table 27, Table 28, and Table 29).

Limitations of the Study

This research was an initial study to examine the manner and the extent that evaluators are utilizing classroom walk-throughs and eWalk for the purposes of evaluation. This study was limited to school administrators who use Media-X Systems' eWalk software program. Nevertheless, as this was one of the first formal studies regarding the use of EETT during classroom walk-throughs, it was likely that the results may be generalized to most other forms of EETT and practices of conducting classroom walk-throughs. There were no parameters placed upon how long the administrator has been in the district and/or held his/her present position; however, the data analysis did not include respondents who were personnel in a central office administrative position or teachers serving as instructional coaches. Additionally, this study was limited to respondents in the three states of Georgia, Iowa, and Kentucky as these included the largest portion of eWalk users. Moreover, the response rate was impeded by the issues that included 1) limiting respondents to building level administrators, 2) issues associated with school district spam filters that blocked emails originating from the Qualtrics email server; 3) uncovering multiple respondents that actually were not using the eWalk software despite having an account; and 4) the inability to

determine how many of the non-respondents fell into category 2 or 3. Despite the ability to have examined the numerous aspects of an administrator's behaviors as a result of conducting classroom walk-throughs with the use of eWalk, the foci of the study related to the impact of an administrator to use walk-throughs for formative evaluation, capacity to function as the lead learner, changes in associated practices of Balanced Leadership responsibilities, and the impact of sharing data with the faculty to work as a professional learning community. The researcher, an assistant principal in the Fort Dodge Community School District, conducts walk-throughs as part of his position. He has a presumption that utilizing eWalk (an EETT), in conjunction with classroom walk-throughs, will increase an administrator's ability to function as a lead learner of a school in order to impact the teaching and the learning to raise the level of student academic achievement.

Delimitations

The survey aimed to elucidate participants' perceptions of how they utilize walk-throughs; therefore, the data gathered was not observational in nature. This study was not intended to examine the relationship between an evaluator's level of eWalk use during walk-throughs and student achievement within the administrator's building(s). Rather, the intent of the study was to establish initial descriptive data to gain an understanding of the evaluator's behavior and perception of the walk-through process in light of their use of eWalk. Although the study was limited to administrators who use eWalk, it would be logical to conclude that the findings might be generalized to the use of other forms of Electronic Evaluation Technology and Tools (EETT) by school administrators. Moreover, the survey did not focus upon the untapped potential for the use of eWalk. Rather, the emphasis was on how current

administrator's behaviors and practices have been affected in relationship to the use of eWalk during classroom walk-throughs.

Recommendations for Future Research

It might be useful for future research to gather data for follow-up and measure the on-going changes in administrative walk-through practices regarding the use of eWalk. It would be beneficial to examine how the utilization of other Electronic Evaluation Technology and Tools (EETT) compare to how eWalk may be used to infuse elements of standardizing the practices of leadership behavior that impact the effectiveness of the teacher evaluation process.

The use of eWalk provides a framework and the possibility for merging student information system (SIS) with evaluation data to truly judge the impact of teacher performance on student academic achievement. This examination could be conducted either quarterly and/or yearly with connection to standardized testing results, as well as further connections regarding student achievement and on-going student progress within the current year's courses. Media-X Systems is currently developing the capabilities to merge a SIS with eWalk. As more attention has been given to the "value-added" effect of a particular teacher, it would be important to not only use their students' standardized assessment data, but integrating classroom walk-through data trends from over time would add a greater perspective of the realities of teaching and learning in the classroom. Likewise, the same process of integrating data gathered might be integrated into emerging performance-pay programs especially those that examine growth in a teacher's effective practices.

It would be prudent to examine how assistant principals utilize EETT in conjunction with "discipline on wheels" (Granada & Vriesenga, 2008). Particularly, it would be beneficial to examine those that are given the primary task for handling discipline matters as well as evaluation of teachers' instruction and the learning practices occurring in the classroom. It could be beneficial to see if and how some building administrators might merge the behavior of high visibility to address behavior referrals as well as utilize EETT to conduct on-going walk-throughs. Furthermore, an emphasis should be upon how building level administrators use technology for dealing with disciplinary matters and in conjunction with walk-throughs to gather on-going data.

As the pressures in the era of accountability increases, the demand is not only upon the building level administrators to improve student achievement, but the increased responsibility of Central Office personnel. Thus, there is a need to examine how central office personnel use the reporting functions of eWalk to monitor and hold accountable building level administrators for the use of classroom walk-throughs and the use of EETT. Furthermore, researchers can examine the practices of central office personnel in conducting walk-throughs with EETT, the role of joint walk-throughs, the role of monitoring and evaluating implementation studies, how these practices inform professional development design for buildings as well as the district administrative teams, and the impact on continuous improvement initiatives. Future research might explore how central office might utilize principals attending monthly curriculum meetings where they continue to learn and review instructional strategies and analyze data to determine the focus for the observations for the following month. Further research is necessitated regarding the role of central office

personnel to utilize the walk-through process as a coaching opportunity for district building-level administrators to support and focus upon improvement of instructional leadership behavior and practices. Of particular interest would be exploring how reflective questions and dialogue build collegiality and foster intellectual stimulation surrounding instructional leadership. Additionally, it would be beneficial to examine other practices of the use of eWalk in relationship to a) how the aggregate data are examined across the district, b) how the aggregate data are used to study implementation of initiatives, c) examination of trends in teaching and learning practices, d) how this data might be used in internal reports, e) how this data might be used in external reports, and f) how the data are used to inform future professional development needs.

Related to how school administrators are utilizing EETT are teachers whom have been placed in the role of an Instructional (Academic) Coach. As many districts are committing personnel and funding to creating and expanding these roles, it would be beneficial to examine the eWalk practices of Instructional Coaches. Specifically, it would be of interest to explore how Instructional Coaches collect data for monitoring and evaluating implementation studies and how these practices inform individual and faculty professional development plans as part of a school's continuous school improvement initiative. Furthermore, it would build upon the research to understand how Instructional Coaches utilizing eWalk collaborate with building administrators and central office personnel in conducting joint classroom walk-throughs as well as the coaching and leading of professionals development associated with analysis of the data.

There may be an additional benefit in investigating all of the different types of joint classroom walk-throughs that are conducted and further exploring how these practices are beneficial to teaching and learning as well as the culture and climate of a school building. Furthermore, as few administrators indicated that they did share the aggregated data from walk-throughs with students (4.0%) and/or parents/other community stakeholders (14.3%) this is a practice in which the further research, perhaps a qualitative study, regarding the practice may yield useful information for other administrators to replicate those behaviors associated with this practice (see Table 26). There is emerging literature surrounding the involvement of teachers in the walk-through process. It would be of interest to further explore how teachers and students are integrated into the process for data collection during walk-throughs and the debriefing process.

The purpose of eWalk was intended for formative evaluation purposes, despite the perception that any form of monitoring of classroom teaching and learning must be for a summative and inspectional model (Media-X, 2010). Future research might explore perceptions of teachers and administrators as related to both the concept of "trust" ($p = .034$) and the elements that assist in creating mutually beneficial relationships between administrators and teachers as related to the process of conducting classroom walk-throughs with the use of eWalk (see Table 28). Specifically, it might be prudent to begin with further examining principals that have embraced the Downey classroom walk-through model and are working to apply the elements related to advancing the reflective feedback process in light of the transformational nature of the teacher and administrator relationship (Downey, et al., 2010). As it was not in the scope of this study, it would be interesting to examine the

differences in administrator behavior and practices associated with eWalk between Elementary and Secondary principals as there have been reported differences in teachers' perceptions of administrators at these different levels as related to "instructional actions" especially related to conducting walk-throughs (Wahlstrom, et al., 2010).

In order to foster a collegial environment, classroom walk-throughs pull in teachers as partners to build ownership and capacity to come together in order to address student academic achievement as a professional learning community (Bushman, 2006; Keruskin, 2005). Bushman (2006) illustrated how involving teachers as classroom walk-through partners can be a powerful step toward creating a collective professional community centered on improving instructional practices while breaking down power barriers and fostering a spirit of collective efficacy. Classroom walk-throughs are most effective in raising student academic achievement when they are rooted in the foundational elements of a strong professional learning community (Bushman, 2006; Downey, et al., 2004; DuFour, et al., 2004; Using the classroom walk-through as an instructional leadership strategy, 2007, February).

As indicated in the results regarding the need for more training (46.7%) for those who did receive training (73.2%) on how to utilize eWalk during classroom walk-throughs, it would seem prudent to explore what types of training might be the most beneficial to replicate (see Table 11). In exploring the best practices of formal training for eWalk and other EETT a researcher may desire to utilize a mix-methods approach. Using mix-methods approach would not only capture the extent of practices that were beneficial and those that individuals would like to further explore, but the researcher could glean best practices as well

as illustrate these through several vignettes. It would be useful to examine the formal training models for conducting walk-throughs as correlated with the use of eWalk as well as further examining the practices of those whom have never been formally trained under any theoretical model. Likewise, it would be interesting to explore the benefits for different models of training including formal workshop training, webinar training, on-site "in-situ" training, alternative on-line training opportunities, coaching, train-the-trainer, and assimilation of the process and data into facilitating professional learning communities.

As there were highly significant results regarding an administrator's practice of sharing aggregate data with the faculty upon the practices and behaviors (formative evaluation $p = .002$; lead learner $p = .001$; Balanced Leadership $p = .027$), it would be logical to further explore the nature of the feedback and debriefing practices that foster the professional learning community (see Table 27, Table 28, and Table 29). Further exploration of how administrators effectively construct faculty meetings to share and discuss the aggregate data gathered with eWalk. Specifically, it would be beneficial to explore how principals translate an observation of a specific vignette from a walk-through and/or trends in data reports into posed questions for the faculty to discuss and engage in reflective conversations. Still needed is further exploration regarding the perceptions and behaviors among teachers in faculties; specifically, examining the best practices that are illustrating how collaborating and examining the data among the entire has positively impacted both teaching and learning. Perhaps the greatest unanswered question for those administrators that are currently sharing aggregate data with their faculty and those desiring to incorporate this practice is how they analyze the collected data as well as engage individual teachers, small

groups, and the whole faculty in a process of reflecting upon the meaning of the data. There would be a benefit of exploring the qualitative side of researching the practices of how administrators are currently sharing the aggregate data with their faculty, and in turn, the impact of these behaviors upon promoting the ability to function as a professional learning community.

Additionally, future research might be interested in exploring the different modes for providing individuals feedback including, verbal, written, and electronic. Likewise, future research might explore the different modes for providing feedback and the processing in which leaders provide verbal feedback and presentation of the data. Furthermore, it would be interesting to explore the differences in how the different groupings for faculty are utilized to review the walk-through data. An unexplored area for investigation could hinge upon the integration of video feedback from walk-throughs and how this might be used to further reflective conversations between administrators and teachers as well as among the faculty.

Conclusion

The professionalization of educational leaders has pushed administrators beyond the managerial roles to a far more active role as the instructional leaders and lead leaders within professional learning communities by focusing upon the professional development needs of teachers and improve the teaching-learning process in each classroom (DuFour & Marzano, 2009; Ellett & Teddlie, 2003). Likewise classroom walk-throughs have shifted from a managerial act to a method for monitoring implementation of instructional practices, professional development initiatives, and student learning experiences. Moreover, school leaders systematic utilization of eWalk allows an administrator to work as the catalyst to

collect data to share with the whole faculty in order to improve teaching and learning as well as engage individuals in reflective conversations through formative evaluation (Cervone & Martinez-Miller, 2007; Granada & Vriesenga, 2008; Kachur, et al., 2009; Skretta, 2007; Using the classroom walk-through as an instructional leadership strategy, 2007, February). As American school administrators are tackling the challenge of student academic achievement for all, it is imperative that monitoring and evaluation of teaching and learning incorporate the practice of using the classroom walk-through observations to collect data to focus school improvement efforts. School leaders must work to both ensure and support teachers as they carry out the implementation of initiatives aimed and improving student learning (Marzano, 2003).

The public has significant financial investments in education and perhaps has an even higher stake in the outcomes of the education system as we continue to learn to live and operate in the 21st century economy. As a result, supervision and evaluation of teachers must not merely be relegated to mere compliance under a summative evaluation system to guarantee high-quality teaching (C. Danielson, 2010; Mathers, et al., 2008). Rather, the practices of supervision and evaluation must embrace behaviors and tools such as the use of eWalk combined with frequent classroom walk-throughs to spur adult learning through formative evaluation. In turn, this practice might leverage change in teaching and learning practices as it is based on self-assessment of the aggregate data with reflective professional conversations that foster a sense of collective efficacy (C. Danielson, 2010). The use of eWalk assists in data gathering and framing the observers mind to become more systemic,

intentional, and purposeful in order to ensure proper implementation of initiatives and the focus on the learning and professional development needs of the faculty.

The full impact of utilizing eWalk upon the teaching and learning practices in a school will be realized through fostering lead learner behaviors and associated practices aimed toward functioning as a professional learning community. The benefits of the use of eWalk for collecting data during classroom walk-throughs extends beyond the administrator as it has the potential for being the catalyst to improve not only teacher's practices but the learning experiences and indirectly the academic achievement results (Cervone & Martinez-Miller, 2007; Kachur, et al., 2009; Richardson, 2006). The purpose of eWalk has always been to provide administrators with a tool to gather data to assist in helping provide consistency in formative evaluation ($p = .002$) and aid in the reflective feedback and professional conversations with teachers (see Table 27) (Media-X, 2010). Moreover, the sharing of this data are cornerstone to not only the ability of an administrator to function as the lead learner ($p = .001$) of the entire school and improve in behaviors associated with the balanced leadership framework ($p = .027$), but it is essential to building a professional learning community ($M = 3.73$) (see Table 28, Table 29, and Table 30). When properly carried out, the power of reflective conversations ($p = .001$, $p = .001$, $p = .042$, $p = .003$) may extend to the entire faculty as a result of sharing the aggregate data and using it as a basis to initiate reflective professional conversations (89.4%) around how to improve both teaching and learning (86.6%) throughout the entire school (see Table 28 and Table 30).

School administrators must understand that management and leadership are intertwined and cannot be separated (Witziers, et al., 2003). Marzano (2003) revealed that at

the cornerstone of school reform is the leadership that ensures sustaining a school improvement initiative by imbedding the work into the organizational structure. The point of merging managerial roles with instructional leadership responsibilities ensures that the manager in the principal not only can institute the initiative, while lead learner ensures proper implementation of the practices. The act of conducting classroom walk-throughs epitomizes the role of instructional leadership to improve teaching and learning (Cervone & Martinez-Miller, 2007; Granada & Vriesenga, 2008; Kachur, et al., 2009). This research deepened the understanding of how eWalk is utilized during the classroom walk-through process to improve instructional practices; as it can be a systematic method to collect and analyze the data gathered from instructional observations.

This study contributes to the body of knowledge regarding informal observations, walk-throughs, and the related use of digital technologies to enhance these processes. By synthesizing how building level principals use eWalk during classroom walk-throughs and its impact upon the role of instructional leaders as lead learners of PLCs, this study contributes to the literature bases regarding educational leadership in light of teacher supervision and evaluation. Exploring how administrators use eWalk during their walk-throughs shed light on how this practice can transform educational supervisory practices and the corresponding impact on leadership responsibilities. As expectations rise for administrators to function as the lead learners of schools, so too must principals alter walk-through practices to indirectly assist individual teachers and the instructional practices of the entire faculty to raise the level student achievement. This aggregate data gathered through the use of eWalk allows for the

administrators to engage the faculty in meaningful and reflective discussions regarding the schools instructional practices.

APPENDIX A. DEFINITION OF TERMS

The following terms were defined for use in the study:

Annual Yearly Progress (AYP): Schools must report on attendance or graduation rates, percentage of test participation, and percentage minimally proficient for the student performance on the yearly test as part of compliance with NCLB legislation.

Data Driven Decision Making: Occurs when data collected serve as the basis to set priorities, monitor progress of those initiatives, and maintain continuous improvement.

Electronic Evaluation Technologies and Tools (EETT): A web-based software program that synchronizes with a hand-held PDAs or portable mini-laptops enabling an observer to collect data during walk-throughs.

Evaluator: Generally, a principal or other administrator who is responsible for conducting supervision and evaluations for teachers.

Formal Evaluation: Teacher observations that are predetermined, and include pre- and post-observation conferences between the evaluator and teacher.

Formative Evaluation: The intent of formative assessment is to occur as "part of" instruction, where constructive feedback is given with the intent to be used "for" coaching the teacher while engaging in meaningful conversations.

Informal Observation: Teacher observations that are unscheduled and allow for flexibility for the administrator regarding frequency and feedback.

Instructional Learner: Typically referred to the role of knowledge and involvement in curriculum, instruction, and assessment as well as monitoring and evaluation lessons and teachers for evaluation purposes.

Lead Learner: A school administrator focused on involvement in the process of teaching and learning with faculty for the purposes of influencing professional development while using data to make informed decisions.

Look-fors: Specific indicators that the observer will look for in the classroom during walk-throughs and may record observational evidence in relationship to teaching and learning.

No Child Left Behind Act of 2001 (NCLB): The federal law passed to make schools accountable for student academic performance.

Professional Learning Community: A group of educators who collaboratively work together through collective inquiry and continuous improvement toward results supporting the shared mission, vision, and values intended for improved student academic achievement.

School Improvement Plan: A strategic plan for continuous improvement targeted at improving student academic achievement and other areas of identified for needing improvement.

Summative Evaluation: Evaluation that is generally completed for personnel records and decision-making regarding retaining and firing personnel that is generally occurs at the end of the evaluation cycle.

Supervision: The process of monitoring and evaluating teachers behavior and progress throughout a teacher's career in order to improve the teacher's practices and skill-set.

Walk-through: The supervisory practice of administrators to visit classrooms for short periods of time to observe instruction and learning, and sometimes gather information regarding these practices. Referred to by many names, including: "learning walks, instructional walks, focus walks, walk-abouts, data walks, data snaps, learning visits, quick

visits, mini-observations, rounds, instructionally focused walkthroughs, administrative walkthroughs, supervisory walkthroughs, collegial walkthroughs, reflective walkthroughs, classroom walkthroughs, and just walkthroughs" as well as walk-throughs (Kachur, et al., 2009).

APPENDIX B. SURVEY QUESTIONNAIRE

Utilizing eWalk during Walk-throughs: Creating a Systematic Practice through the Operation of Electronic Evaluation Technologies and Tools (EETT) to Enhance the Role of the Evaluator to Function as Lead Learner

Ben Johnson
Iowa State University
ELPS Dissertation Survey

General Questions Regarding Professional Development for Walk-throughs

Including this year, how long have you been using the eWalk software product in conjunction with your classroom walk-throughs?

- 0 – 2 years
- 3 or more years

Have you ever received any formal training (conferences, workshops, meetings, etc.) to conduct classroom walk-throughs?

1. YES
2. NO

- ***If YES***, In what theoretical model have you been trained to conduct classroom walk-throughs?
    - MCREL's Power Walk-through Training
    - 360 Degree Walk-through
    - Classroom Walk-through Training (CWT)
    - Three Minute Walk-through (Downey)
    - Management-By-Walking-Around (MBWA)
    - Learning Walk
    - Data-in-a-Day (DIAD)
    - UCLA SMP Classroom Walk-through
    - Instructional Practices Inventory (IPI)
    - Look 2 Learning (L2L)
    - Other: _____
- ***If YES***, If you have been trained for walk-throughs, to what extent do you agree with the following statement: *The formal walk-through training was useful.*
    - Strongly Disagree
    - Disagree
    - Neither Agree or Disagree
    - Agree
    - Strongly Agree

Have you read professional literature, including research or training materials (articles or books), that describe the procedures for conducting classroom walk-throughs?

1. YES
2. NO

Did you receive formal training in how to use the eWalk software?

1. YES
2. NO

- ***If YES***, The eWalk software training was effective in helping me know how to use the product.
    - Strongly Disagree
    - Disagree
    - Neither Agree or Disagree
    - Agree
    - Strongly Agree

Do you think that you need more training in how to utilize eWalk in your walk-throughs?

1. Yes
2. No

- **If YES**, What further training would you like to see regarding eWalk?

Are you required to conduct walk-throughs in your school/district?

1. YES
2. NO

- **If Yes,** Are you required to use the eWalk software when you conduct your walk-throughs?
    1. YES
    2. NO

What device do you use when conducting your walk-throughs with eWalk?

- Palm
- Blackberry
- Windows Mobile
- iPhone
- iPodTouch
- iPad
- Wireless laptop using a Browser
- Off-line client on a laptop/tablet
- Pen and Paper

Do you take text notes while using eWalk?

- Never
- Always
- Only when necessary

On average, how many total walk-throughs do you conduct per week?

- 1 – 5 Walk-throughs
- 6 – 10 Walk-throughs
- 11 – 15 Walk-throughs
- 16 -20 Walk-throughs
- 21 or more Walk-throughs

On average, how many of those weekly walk-throughs do you conduct with eWalk?

- 1 – 5 Walk-throughs
- 6 – 10 Walk-throughs
- 11 – 15 Walk-throughs
- 16 -20 Walk-throughs
- 21 or more Walk-throughs

On average, how many of those weekly walk-throughs do you conduct without eWalk?

- 1 – 5 Walk-throughs
- 6 – 10 Walk-throughs
- 11 – 15 Walk-throughs
- 16 -20 Walk-throughs
- 21 or more Walk-throughs

Because you now have eWalk available to you, do you conduct walk-throughs more often than before using the software product?

1. YES
2. NO

Has the availability of eWalk, to you, increased the quantity of data that you can collect during your walk-throughs versus your practices prior to utilization of eWalk?

1. YES
2. NO

Has the availability of eWalk, to you, increased the quality of data that you can collect during your walk-throughs versus your practices prior to utilization of eWalk?

1. YES
2. NO

Function and Purpose for Conducting Walk-throughs

Please rate your level of agreement with the following statements:
1 Strongly Disagree 2 Disagree 3 Neither Agree or Disagree 4 Agree 5 Strongly Agree

Formative v. Summative Evaluation STEMS – 8 Stems

When I conduct classroom walk-throughs…

- Most of my walk-throughs typically last 3 minutes or less.
- I collect data on the teacher's adjustments to students' learning needs during the lesson.
- I collect data on the teacher's decision-making during the lesson.
- I collect data on students' engagement during the lesson.
- I collect data on students' academic learning during the lesson.
- I am more likely to visit classrooms at unscheduled times throughout the day than I am with more formal teacher observations.
- The data I collect is used for professional growth of the teacher.
- The data I collect helps me coach the teacher regarding instructional practices.

Lead Learner STEMS – 12 Stems

When I conduct classroom walk-throughs…

- The walk-through data I collect helps me in determining the professional development needs of the teacher.
- Building-level professional development is influenced by the walk-through data that administrators collect.
- District-level professional development is influenced by the walk-through data that administrators collect.
- The use of classroom walk-throughs helps teachers reflect on the effectiveness of their instruction.
- The use of classroom walk-throughs improves the academic learning of students in my school.
- I follow-up with teachers to discuss their professional growth and use their trend data from multiple walk-throughs to frame the conversation.
- Teachers find classroom walk-throughs to be valuable to them.
- The use of classroom walk-throughs increases my ability to be an instructional leader.
- The data collected helps me have better conversations with my teachers about instruction.
- The data collected allows our conversations about instruction to be more objective rather than subjective.
- More collegial relationships between teachers and administrators are fostered.
- I have a greater awareness of teaching and learning within my school.

Interaction with other administrators

Do you ever conduct joint walk-throughs (i.e., where another educator accompanies you)?

1. YES
2. NO

- **IF YES,** With whom have you conducted joint walk-throughs? (check all that apply)
  - Other administrators in the building
  - Other administrators in the district
  - Other administrators outside the district
  - Teachers
  - Students
  - Parents or other community stakeholders

- **IF YES,** Do you feel that doing joint walk-throughs with someone else is helpful?
  1. YES
  2. NO

- **If YES ,** Which of these do you perceive are benefits of having someone join you on a walk-through? (check all that apply)
  - To ensure cross-observer reliability
  - To offer a different perspective on what was observed
  - To share experiences and knowledge from other settings
  - Other (please describe)

Sharing the walk-through data results

Do you share aggregated walk-through data with your faculty?

1. YES
2. NO

- **IF YES,** How do you share the aggregated walk-through data? (check all that apply)
  - With the faculty as a whole
  - In smaller groups such as departments or teacher teams
  - The data are only shared with individuals

- **If YES,** How often do you share aggregated walk-through data with your faculty?
  - Once every week or two.
  - Once a month.
  - Once a quarter or trimester (3 or 4 times a year)
  - Once a semester (2 times a year).
  - Once a year.

If YES, **Please rate your level of agreement with the following statements:**

1 Strongly Disagree 2 Disagree 3 Neither Agree or Disagree 4 Agree 5 Strongly Agree

- The faculty has a sense of ownership for the walk-through data.
- Sharing walk-through data facilitates open dialogue about instructional practices occurring in our classrooms.
- Collectively teachers use walk-through data to systemically analyze the impact of curricular initiatives.
- Walk-through data help us identify areas for professional growth in teaching and learning

Do you share aggregated walk-through data with students?

1. YES
2. NO

Do you share aggregated walk-through data with parents or other community stakeholders?

1. YES
2. NO

Balanced Leadership

Please use the following scale to indicate your level of agreement with the statements below:

1 Much less than before
2 Less than before
3 About the same as before
4 More than before
5 Much more than before

BECAUSE OF MY USE OF E-WALK:

- I am directly involved in helping teachers design curricular activities for their classes.
- I make systematic and frequent visits to classrooms.
- Individuals in my school who excel are recognized and rewarded.
- Teachers in my school have direct input into all important decisions.
- I am aware of the personal needs of the teachers in my school.
- I try to inspire my teachers to accomplish things that might seem beyond their grasp.
- The teachers in my school are aware of my beliefs regarding schools, teaching, and learning.
- I continually monitor the effectiveness of our curriculum.
- I am directly involved in helping teachers address instructional issues in their classrooms.

- Seniority is not the primary method of reward and advancement in my school.
- I continually monitor the effectiveness of the instructional practices used in my school.
- I encourage people to express opinions that are contrary to my own.
- I am directly involved in helping teachers address assessment issues in their classrooms.
- I continually monitor the effectiveness of the assessment practices used in my school.
- I adapt my leadership style to the specific needs of a given situation.
- We systematically have discussions in my school about current research and theory.

General Demographic Questions

Are you male or female?

1. Male
2. Female

What is your current age? (US Census)

- 20 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 years and over

What state, country, or continent do you live in?

-

What is the highest level of education you have attained?

1. Master's Degree (M.A., M.A.T., M.Ed., M.S.)
2. Educational Specialist or professional degree (at least one year beyond master's level)
3. Doctoral or first professional degree (Ph.D., Ed.D., etc.)
4. Other: _____

Including this school year, how many years have you been an Administrator/Evaluator of THIS or ANY OTHER school/district?

- 1 – 5 years
- 6 – 10 years
- 11 or more years

Including this school year, how many years have you served in your ***present*** administrative position?

- 1 – 5 years
- 6 – 10 years
- 11 or more years

Do you work for a public or private school?

1. Public
2. Private

Within what type of community best describes where your school is located?

1. Urban
2. Suburban
3. Rural

Where do you work?

1. Elementary school
2. Middle /Junior High School
3. High School
4. Central Office

How many students are in your school?

At the end of the LAST school year (2009 – 2010), did your school make Adequate Yearly Progress?

1. YES
2. NO
3. NOT APPLICABLE; MY SCHOOL IS NOT IN THE UNITED STATES

APPENDIX C. CONSENT FORMS

CONSENT FORM FOR: UTILIZING eWALK DURING WALK-THROUGHS: CREATING A SYSTEMATIC PRACTICE THROUGH THE OPERATION OF ELECTRONIC EVALUATION TECHNOLOGY AND TOOLS (EETT) IN ORDER TO ENHANCE THE ROLE OF THE EVALUATOR TO FUNCTION AS LEAD LEARNER

October 25, 2010

Dear School Administrator:

You are being asked to take part in this study because you are registered with Media-X's system to use and operate the eWalk software. You have been chosen because you are involved in using eWalk software in conjunction with conducting your classroom walk-throughs. The purpose of this study is to examine the impact of using eWalk upon evaluators' perceptions and behaviors regarding the purpose and intent of the walk-through process and how walk-through results are utilized.

The data gathered from this survey will be used in an Iowa State University dissertation research study, which will provide information that allows for recommendations regarding practices associated with conducting classroom walk-throughs. Additionally, the aggregated results of the survey will be shared in report form with Media-X Systems, Inc. in order to better serve and be responsive to the needs of its clientele. The aggregate data gathered in this survey also may be used to publish articles in scholarly journals or to present at educational conferences.

Records identifying participants will be kept confidential. No individual respondents will be identified. The survey software will not record any personal data or information that may identify participants. The primary investigator and supervising professor will be the only individuals with access to the individual survey responses. Reports summarizing the results will be shared, but in such a way that individual participants cannot be identified.

Participating in this study is completely voluntary. You may choose not to take part in the study and may stop participating at any time, for any reason, without penalty or negative consequences.

By completing the survey, you indicate that you voluntarily agree to participate in this study. You may choose not to take part in the study or to stop participating at any time, for any reason, without penalty or negative consequences. You can skip any questions that you do not wish to answer. For further information about the study, please contact Ben Johnson, principal investigator, Assistant Principal, Fort Dodge (IA) Senior High School, at (515) 571-0308 to discuss any questions before deciding to participate. If you have any questions about the rights of research subjects, please contact the IRB Administrator at Iowa State University at (515) 294-4566 or IRB@iastate.edu.

- I have read the informed consent and I agree to participate:
  - CLICK TO TAKE THE SURVEY

http://elps.qualtrics.com/SE/?SID=SV_1Nyv49jL3H9ORJG

CONSENT FORM FOR: UTILIZING eWALK DURING WALK-THROUGHS: CREATING A SYSTEMATIC PRACTICE THROUGH THE OPERATION OF ELECTRONIC EVALUATION TECHNOLOGY AND TOOLS (EETT) IN ORDER TO ENHANCE THE ROLE OF THE EVALUATOR TO FUNCTION AS LEAD LEARNER

Media-X Systems eWalk Survey Posted Link for all eWalk Users

October 25, 2010

Dear School Administrator:

You are being asked to take part in this study because you are registered with Media-X's system to use and operate the eWalk software. You have been chosen because you are involved in using eWalk software in conjunction with conducting your classroom walk-throughs. The purpose of this study is to examine the impact of using eWalk upon evaluators' perceptions and behaviors regarding the purpose and intent of the walk-through process and how walk-through results are utilized.

The data gathered from this survey will be used in an Iowa State University dissertation research study, which will provide information that allows for recommendations regarding practices associated with conducting classroom walk-throughs. Additionally, the aggregated results of the survey will be shared in report form with Media-X Systems, Inc. in order to better serve and be responsive to the needs of its clientele. The aggregate data gathered in this survey also may be used to publish articles in scholarly journals or to present at educational conferences.

Records identifying participants will be kept confidential. No individual respondents will be identified. The survey software will not record any personal data or information that may identify participants. The primary investigator and supervising professor will be the only individuals with access to the individual survey responses. Reports summarizing the results will be shared, but in such a way that individual participants cannot be identified.

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By completing the survey, you indicate that you voluntarily agree to participate in this study. You may choose not to take part in the study or to stop participating at any time, for any reason, without penalty or negative consequences. You can skip any questions that you do not wish to answer. For further information about the study, please contact Ben Johnson, principal investigator, Assistant Principal, Fort Dodge (IA) Senior High School, at (515) 571-0308 to discuss any questions before deciding to participate. If you have any questions about the rights of research subjects, please contact the IRB Administrator at Iowa State University at (515) 294-4566 or IRB@iastate.edu.

- I have read the informed consent and I agree to participate:
  - CLICK TO TAKE THE SURVEY

http://elps.qualtrics.com/SE/?SID=SV_eL2O1EY9RflKa7G

APPENDIX D. SURVEY CORRESPONDENCE

1. Initial eWalk Media-X Systems Introduction to the Survey

You are being asked to take part in this study because you are registered with Media-X's system to use and operate the eWalk software. You have been chosen because you are involved in using eWalk software in conjunction with conducting your classroom walk-throughs. The purpose of this study is to examine the impact of using eWalk (an Electronic Evaluation Technology and Tool) upon an evaluator's perception and behavior regarding the purpose and intent of the walk-through process and how the data results are utilized.

If you agree to participate, you will be asked to click on a link in order to fill out a web-based survey about your practices and perceptions of the classroom walk-through process that will take about 15 minutes. *Questions will include general questions about your background training and experiences conducting classroom walk-throughs, the function and purposes of the walk-through process, conducting joint walk-throughs and the sharing of the data from walk-throughs, links to associated practices with the Balanced Leadership framework, as well as additional demographic information.* In reflecting on questions, you may further examine how you might use eWalk to impact student academic achievement at your school.

2. E-Mail Follow-up Reminder/Request for eWalk Media-X Systems Survey

October 28, 2010 / November 1, 2010

Dear eWalk School Administrators:

Recently, you received an invitation to take part in a study because you are registered with Media-X's system to use and operate the eWalk software. You have been chosen because you are involved in using eWalk software in conjunction with conducting your classroom walk-throughs. The purpose of this study is to examine the impact of using eWalk (an Electronic Evaluation Technology and Tool) upon an evaluator's perception and behavior regarding the purpose and intent of the walk-through process and how the data results are utilized.

If you agree to participate, you will be asked to click on a link in order to fill out a web-based survey about your practices and perceptions of the classroom walk-through process that will take about 15 minutes. In reflecting on questions, you may further examine how you might use eWalk to impact student academic achievement at your school. Your participation will provide important data regarding the use of eWalk as an instructional leader of your school.

Participating in this study is completely voluntary. You may choose not to take part in the study and may stop participating at any time, for any reason, without penalty or negative consequences.

By completing the survey, you indicate that you voluntarily agree to participate in this study. For further information about the study, please contact Ben Johnson, principal investigator, Assistant Principal, Fort Dodge (IA) Senior High School, at (515) 571-0308 to discuss any questions before deciding to participate. If you have any questions about the rights of research subjects, please contact the IRB Administrator at Iowa State University at (515) 294-4566 or IRB@iastate.edu.

- Please click the following link that will take you to the informed consent and to take the survey:
    - CLICK TO TAKE THE SURVEY

  http://elps.qualtrics.com/SE/?SID=SV_1Nyv49jL3H9ORJG

3. Final E-Mail Reminder/Request for eWalk Media-X Systems Survey

November 8, 2010

Dear eWalk School Administrators:

Two weeks ago, you received an invitation to take part in a study because you are registered with Media-X's system to use and operate the eWalk software. Please consider completing the survey in the next week. Your participation will provide important data regarding the use of eWalk as an instructional leader of your school. The purpose of this study is to examine the impact of using eWalk (an Electronic Evaluation Technology and Tool) upon an evaluator's perception and behavior regarding the purpose and intent of the walk-through process and how the data results are utilized.

Participating in this study is completely voluntary and should only take 15 minutes. You may choose not to take part in the study and may stop participating at any time, for any reason, without penalty or negative consequences. In reflecting on questions, you may further examine how you might use eWalk to impact student academic achievement at your school.

By completing the survey, you indicate that you voluntarily agree to participate in this study. For further information about the study, please contact Ben Johnson, principal investigator, Assistant Principal, Fort Dodge (IA) Senior High School, at (515) 571-0308 to discuss any questions before deciding to participate. If you have any questions about the rights of research subjects, please contact the IRB Administrator at Iowa State University at (515) 294-4566 or IRB@iastate.edu.

- Please click the following link that will take you to the informed consent and to take the survey:
    - CLICK TO TAKE THE SURVEY

APPENDIX E. INSTITUTIONAL REVIEW BOARD REQUEST

Office for Responsible Research
1138 Pearson Hall
Iowa State University
Ames, Iowa 50011.

To Iowa State University Institutional Review Board:

I am writing on behalf of Benjamin J. Johnson to communicate my approval for him to conduct research centered on the role of Media-X's classroom observation software program, *eWalk*. I have participated in conversation with Benjamin, a current ELPS doctoral student at Iowa State University, and his major professor, Dr. Scott McLeod. In our conversation we discussed his interest in exploring how school administrators utilize the eWalk software in conjunction with conducting classroom walk-throughs and the impact upon the role of the evaluator. I am giving my company's approval for Media-X to assist in providing access to school administrators that actively utilize eWalk to serve as volunteer participants in his dissertation study.

I understand that the purpose of this study is to examine the use of eWalk in conjunction with conducting walk-throughs and the impact upon an evaluator's perception and behavior regarding the purpose and intent of the walk-through process. It is my understanding that eWalk users will be asked to voluntarily fill out a 15-minute online survey about their practices and perceptions of the classroom walk-through process. We will allow for eWalk users to be directed to have access to participate in the survey. Questions will include general questions about participants' background training and experiences conducting classroom walk-throughs, the function and purposes of the walk-through process, conducting joint walk-throughs and the sharing of the data from walk-throughs, links to associated practices with the Balanced Leadership framework, as well as additional demographic information.

It is my hope that, by conducting this research, there may be a collective benefit for the administrators using eWalk to deepen their understanding by reflecting upon how they utilize the walk-through process to help improve instructional practices in their buildings. Specifically, the information provided will help answer the following questions: (1) Is there a significant relationship between increased use of eWalk and evaluators' perception of the utility of the walk-through process for formative rather than summative evaluation purposes?; (2) Did the evaluators' perceptions of themselves as lead learners of the faculty change due to the increased use of eWalk?; (3)Did the evaluators' perceptions of their behavior associated practices linked to the Balanced Leadership framework change due to conducting walk-throughs with the use of eWalk? Media-X will receive a copy of the aggregated, anonymized results and have the ability to be responsive to our customers' needs. I understand that the data gathered will be shared with the Iowa State University Educational Leadership and Policy Studies (ELPS) faculty as part of a dissertation study, utilized for possible future scholarly articles, as well as with myself (the President/CEO of Media-X Systems).

Sincerely,

Steve Moretti
President/CEO Media-X Systems
steve@media-x.com
1-888-722-9990 ext. 106

APPENDIX F. REFERENCES

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